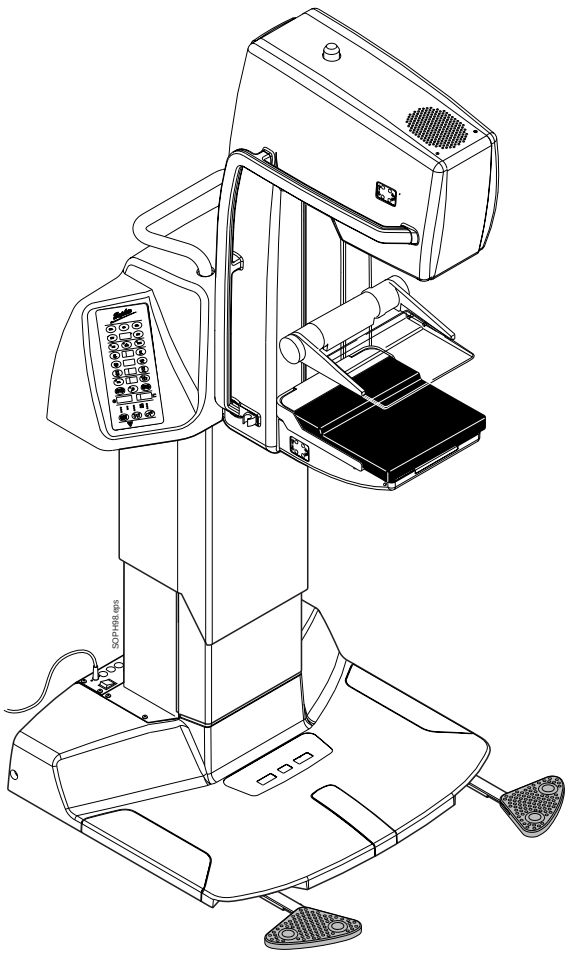
SOPHIE

MAMMOGRAPHIC X-RAY UNIT



SPARE-PARTS MANUAL

PLANMED Oy **788503/3**

1998-02

This manual of spare-parts and subassemblies is for the SID650 Sophie Mammographic X-ray unit. Note, that for the SID600 units there is a separate spare-parts manual, code 788500.

Always check Planmed technical bulletins for the latest information on part modifications and changes before ordering spare-parts. This spare-parts manual will be periodically updated to include these modifications and changes.

Planmed pursues a policy of continual product development. Although every effort is made to produce up-to-date product documentation this publication should not be regarded as an infallible guide to current specifications. We reserve the right to make changes without prior notice.

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PUBLICATION PART NUMBER - 788503 VERSION 3

DATE ISSUED 1998-02

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Chapter

A

ABOUT THIS MANUAL

1 GENERAL

NOTE: **This spare-parts manual is valid for all current SID650 SOPHIE units. Since Planmed reserves the right of changes or alterations, future releases of this manual might not be valid in all parts for earlier manufactured units.**

- All entries in the spare-part tables are single items, when ordering please always specify part number AND quantity.
- Boldface entries indicate a subassembly (a spare-part that consists of several factory-preassembled parts).
- Some spare-parts are only available as subassemblies, because either special tools or manufacturing procedures are required for assembling the subassembly.

NOTE: **There is a separate spare-parts manual for the SID600 Sophie units, code 788500**

2 WARRANTY REPLACEMENTS

2.1 Information required

The following information must be provided to PLANMED prior to shipment of replacement parts covered under warranty:

- Distributor name and address
- Shipping address if different
- Part number, description and quantity
- Mammography model and serial number
- Reason for requesting the replacement
- Preferably a detailed description of the problem and its symptoms
- Shipping method requested

Chapter

B

ACCESSORIES & TOOLS

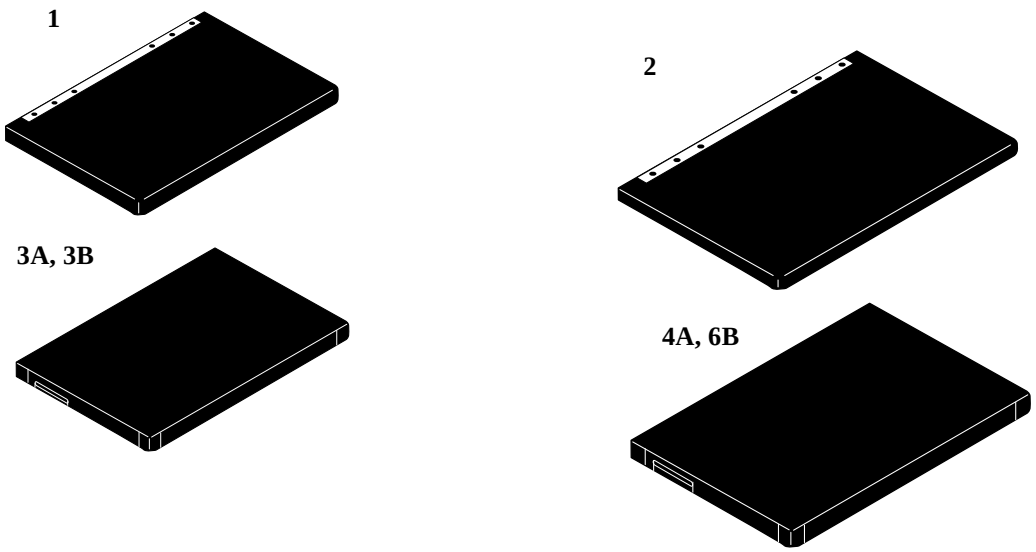
2 GENERAL ABOUT ACCESSORIES

This chapter contains drawings of all currently available accessories for the SOPHIE mammographic unit.

- For ACCESSORIES (such as compression paddles and cassettes), please see page B-2
- For SPECIAL ACCESSORIES (such as screens and test phantoms), please see page B-7
- For SPECIAL TOOLS, please see page B-9
- For exploded views of all accessories, please refer to “COMPRESSION PADDLES & SHIELDS” on page 34 in Chapter-D, "MECHANICAL PARTS & MOTORS".

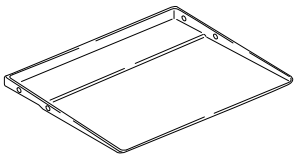
3 ACCESSORIES

3.1 Film cassettes



Ref	Part no.	Description
1	7000311	Cassette Kodak MIN-R2(Daylight) 18x24 cm
2	7000321	Cassette Kodak MIN-R2 (daylight) 24x30 cm
3A	7000411	Cassette Mamoray & MR Detail 18x24 cm
3B	7000431	Cassette Mamoray & MR Detail S 18x24 cm
4A	7000421	Cassette Mamoray & MR Detail 24x30 cm
4B	7000441	Cassette Mamoray & MR Detail S 24x30 cm

3.2 Upper compression paddles



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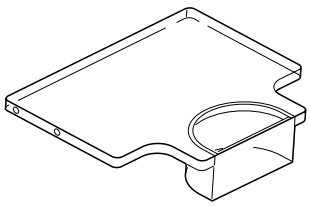

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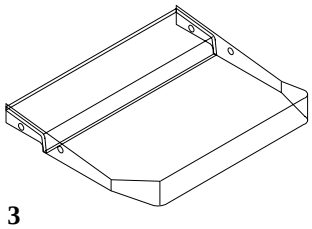

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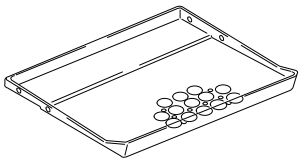

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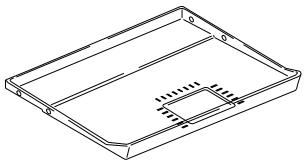

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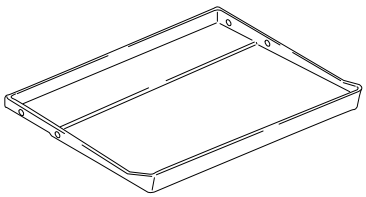

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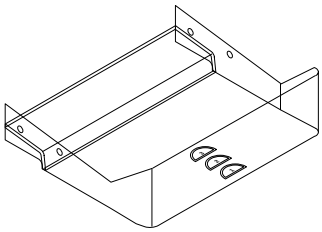

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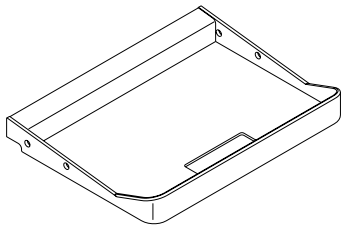


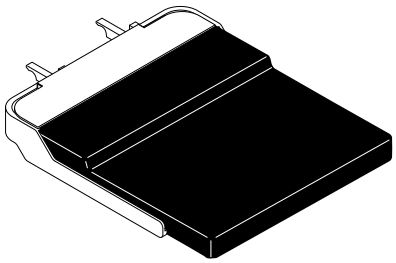
8

Ref	Part no.	Description
1	7000131	Compression paddle, Low edge 18x24 cm (twincomp)
2	7000120	Extended spot paddle 18x24 cm
3	7000134	Compression paddle 18x24cm
4	7000132	Perforated biopsy paddle 18x24 cm
5	7000133	Rectangular biopsy paddle 18x24 cm
6	7000140	Compression paddle, High front 24x30 cm
7	7000135	Compression paddle, extra high lip 18x24cm
8	7519628	Rectangular biopsy paddle 24x30 cm

3.3 Lower compression paddles & bucky grids

Standard lower compression paddle

1



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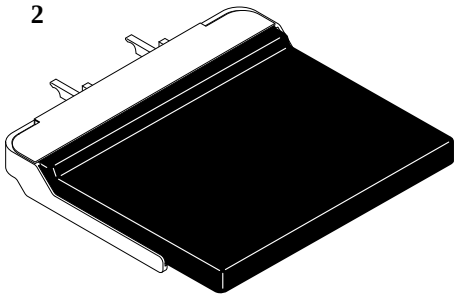

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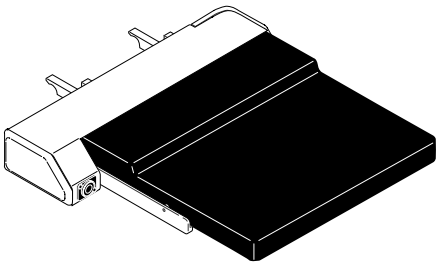

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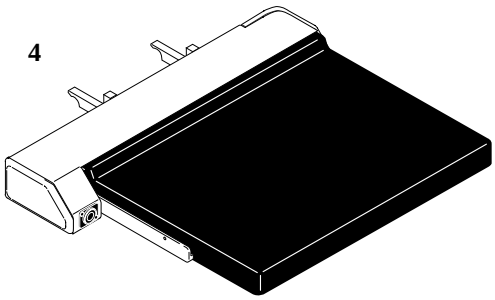
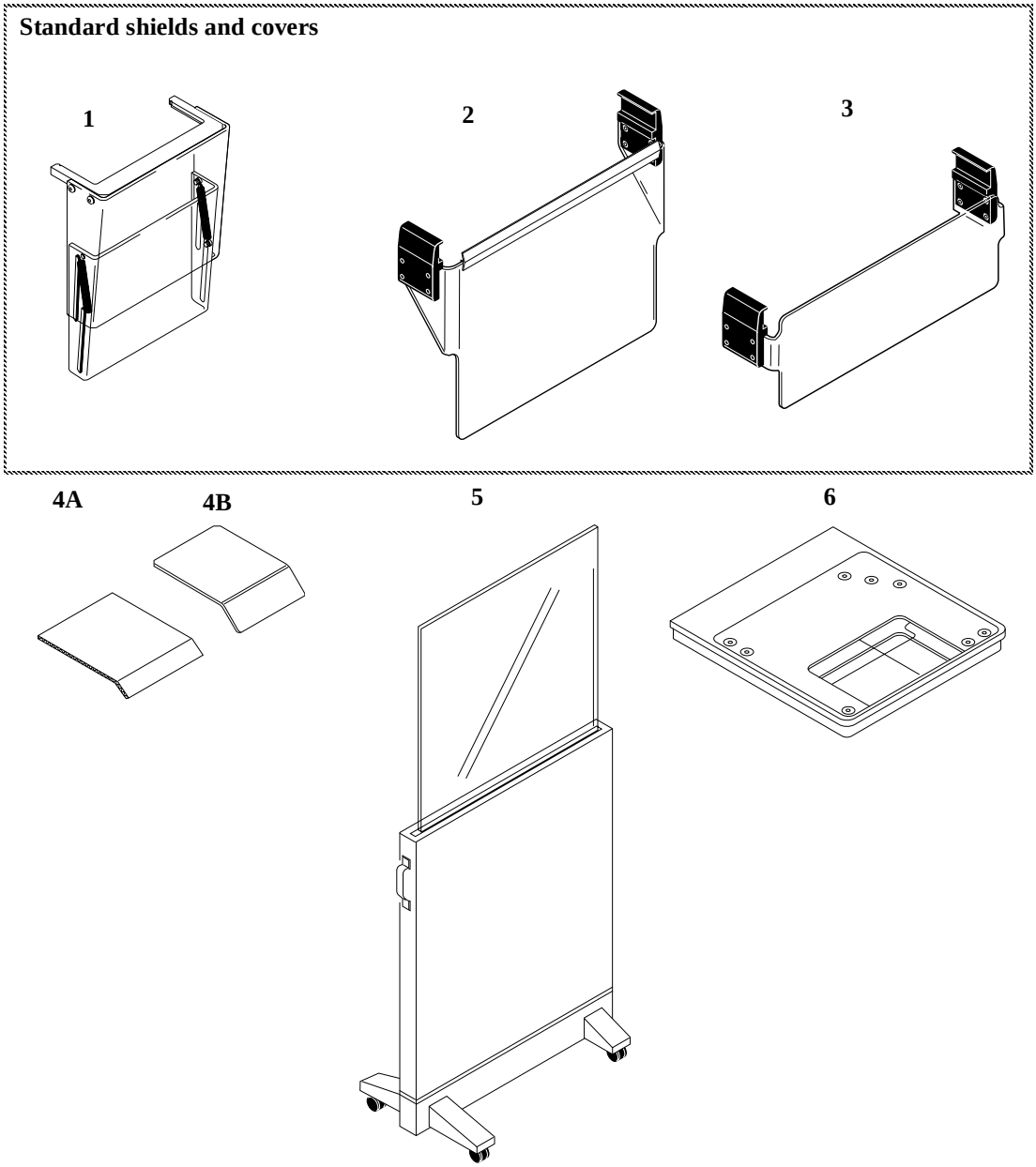


Ref	Part no.	Description
1	7000011	Carbon fiber R2 (daylight) 18x24 cm
2	7000021	Carbon fiber paddleR2(daylight) 24x30 cm
3	7000211	Bucky R2 (daylight) 18x24 cm
4	7000221	Bucky R2 (daylight) 24x30 cm

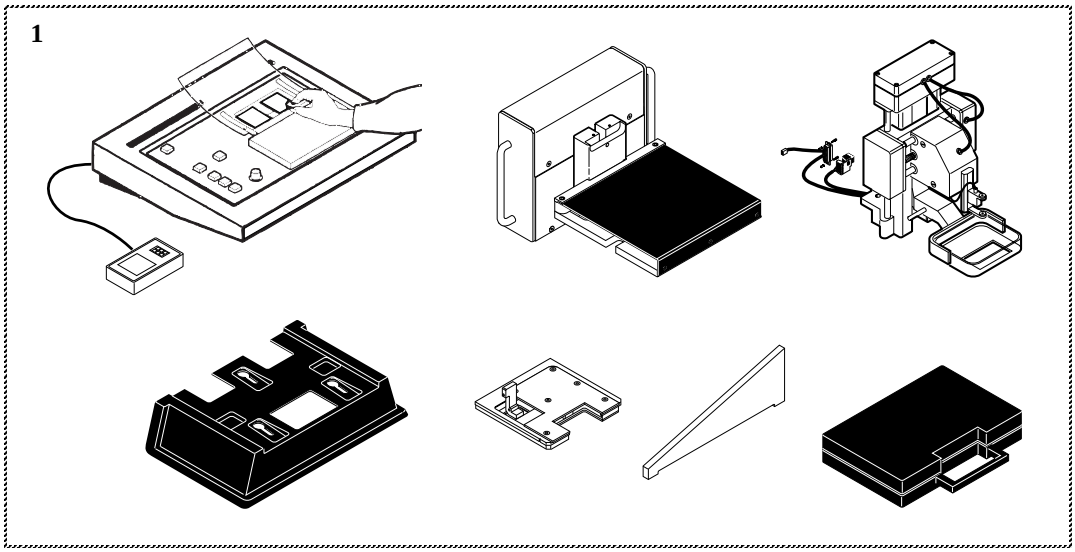
3.4 Shields & covers



Ref	Part no.	Description
1	7615270	Chin guard (attaches to beam window)
2	7614143	Abdomen guard (for daylight cassettes)
3	7614146	Biopsy shield (daylight)
4A	7004040	Beam window cover (Cardboard)
4B	7004041	Beam window cover, Mobile (Plastic)
5	7001000	Radiation shield (Pb eq.0,5mm)
6	7614180	Hair cursor attachment

3.5 Stereotactic device

1



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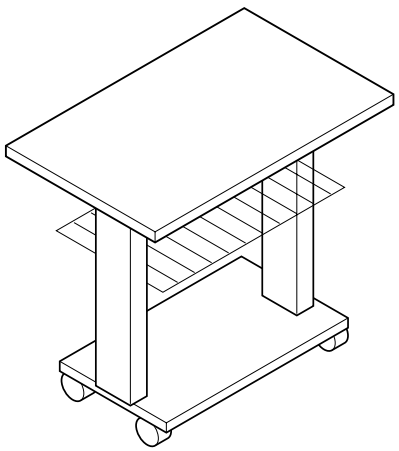
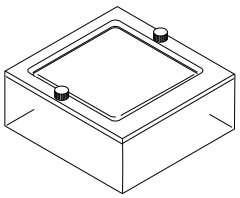


Ref	Part no.	Description
1A	7004000	Planmed Cytoquide biopsy unit R (Non-daylight), Operator console, remote control unit Biopsy diaphragm, cassette table cover, 15° Calibration tool, Equipments
1B	7004001	Planmed Cytoquide biopsy unit R2 (Day-light), Operator console, remote control unit Biopsy diaphragm, cassette table cover, 15° Calibration tool, Equipments
2	7005100	Trolley for the Planmed Cytoquide

4 SPECIAL ACCESSORIES

4.1 Phantoms

1



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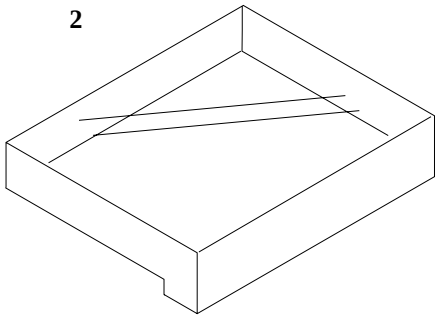
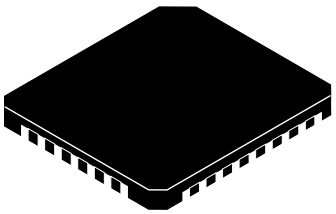


4.2 Software chips

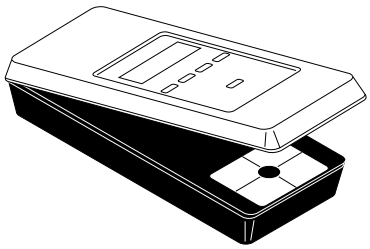
3A,3B



Ref	Part no.	Description
1	7003001	Test phantom RMI model 156
2	7003002	AEC-Calibration phantom (Planmed)
3A	7841091	Software chip, Rear CPU PLCC
3B	7841092	Software chip, Tube CPU PLCC

4.3 Test & measurement devices

1



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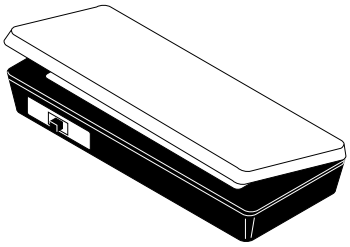

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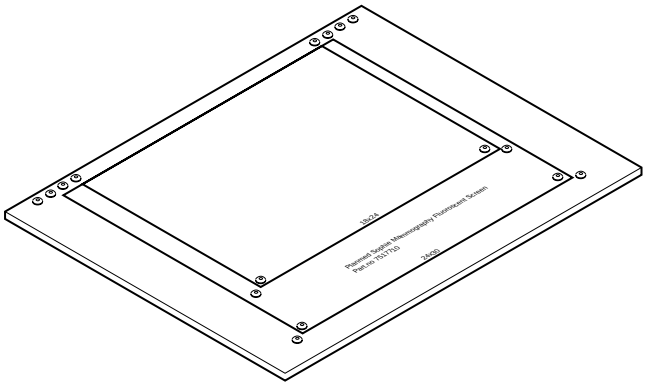
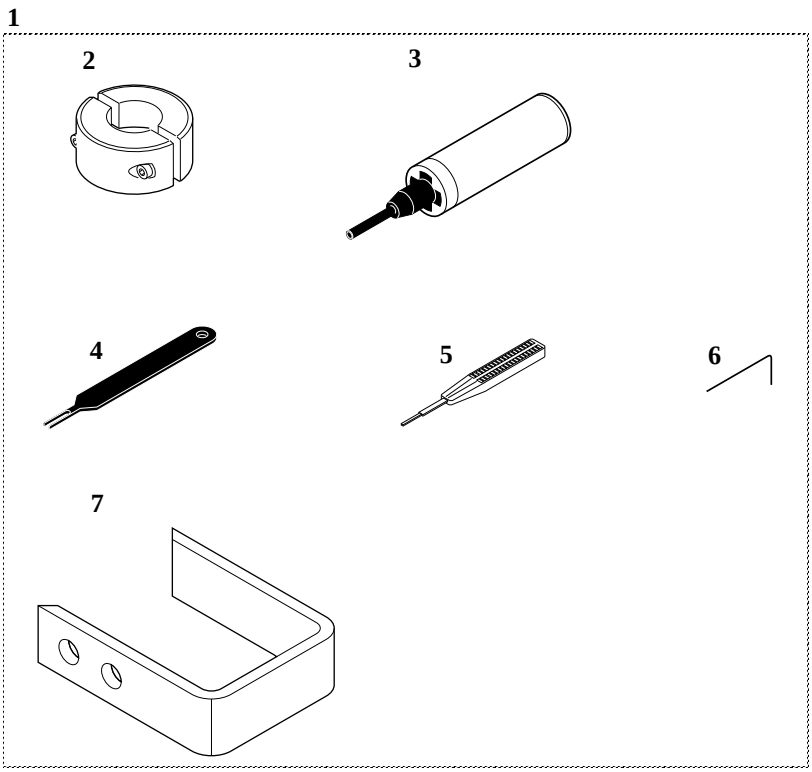


Ref	Part no.	Description
1	7003003	Densitometer
2	7003004	Sensitometer
3	7003006	Fluorescent screen

5 SPECIAL TOOLS



Ref	Part no.	Description
1	7003040	Special tool kit
2	7003007	MAG/LOAD clamp (recommended during replacing tube-head)
3	7003008	Pin-extracting tool UMNL
4	7003009	Pin-extracting tool MINIFIT
5	7003010	Pin-extracting tool E-CONNECTORS
6	7003050	Allen key for Lift and rotation motor pulse detector (Hedss 5500)
7	7517722	Cass. micro holder

Chapter

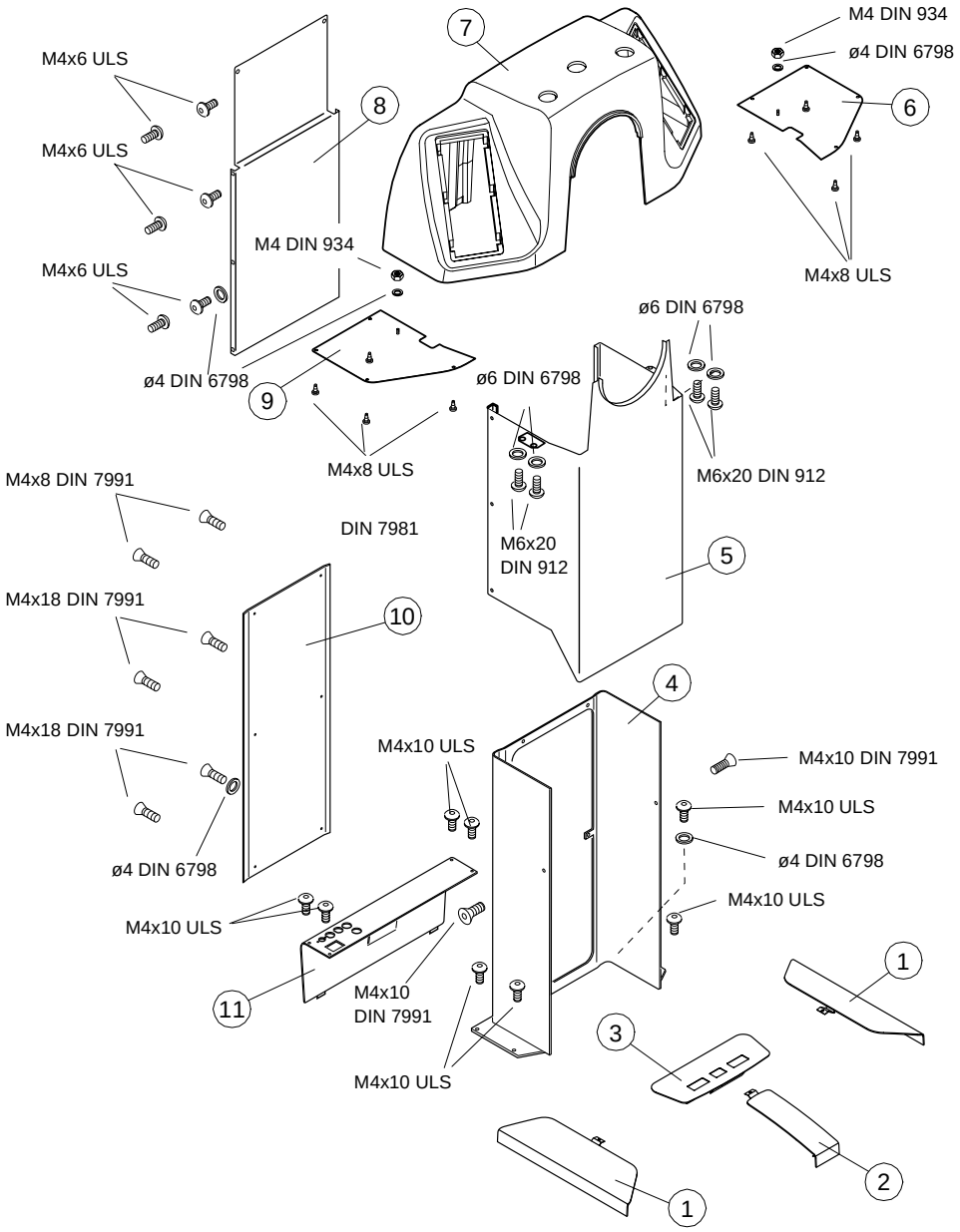
C

COVERS & SCREWS

1 GENERAL

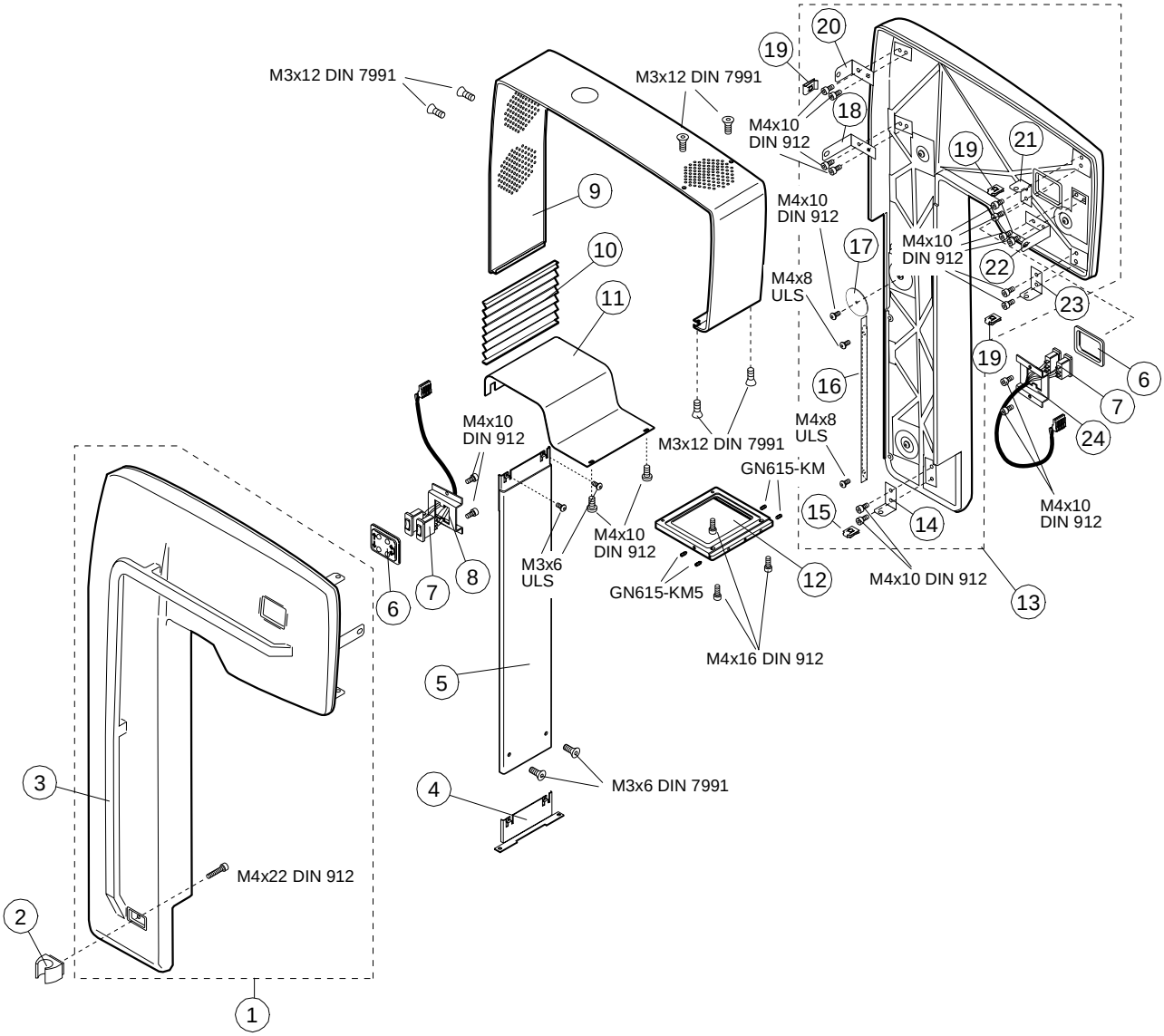
- All the covers (except for cassette table top cover) are shown in this chapter
- A complete list of DIN numbers of screws, nuts and washers are shown in page of C-4 in this manual

2 COLUMN & BASE COVERS



Ref	Part no.	Description
1	7527805	Side cover plate
2	7527804	Front cover plate
3	-	Base display assembly, see page D-3
4	7527240	Stationary column rear cover
5	7523230	Telescopic column front cover
6	7529303	Hood bottom cover plate, right
7	7519301	Hood (complete, no subassemblies)
8	7523240	Telescopic column rear panel
9	7549303	Hood bottom cover plate, left
10	7517223	Stationary column rear panel
11	-	Base rear cover (currently available only as a subassembly, see chapter “Mechanical Parts”)

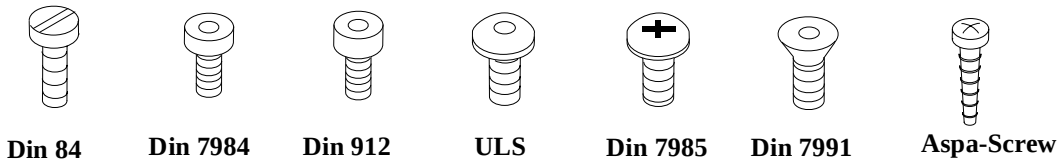
3 C-ARM COVERS



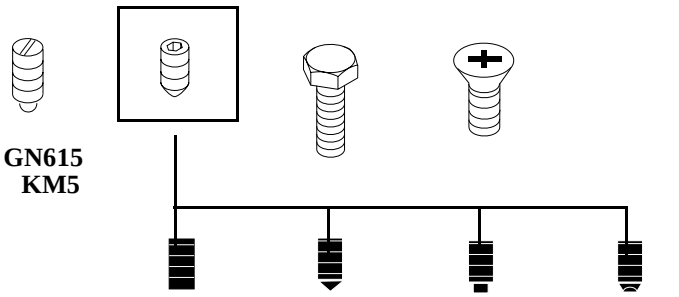
Ref	Part no.	Description
1	**7615174**	**Left C-arm side panel (complete)**
2	7514794	Bucky cable holder
3A	7515253	Handle, right
3B	7515254	Handle, left
4	7525365	Support plate (for vertical cover)
5	7525366	C-arm vertical cover
6	7511529	Switch cover
7	7827784	Side panel switch cable
8	7515258	Switch holder plate, right
9	7525257	C-arm top cover
10	7515267	Protective curtain
11	7525303	C-arm lower cover
12	7515314	Beam window
13	**7615175**	**Right C-arm side panel (complete)**
14	7515246	Fastening plate 5.
15	7255025	Plate nut M5
16A	7525242	Protective curtain guide, right
16B	7545242	Protective curtain guide, left

Ref	Part no.	Description
17	7515245	Handle washer
18	7515244	Fastening plate 4.
19	7255023	Plate nut M3
20	7515241	Fastening plate 3.
21	7515239	Fastening plate 2.
22	7515243	Fastening plate 6.
23	7515238	Fastening plate 1.
24	7535258	Switch holder plate, left

4 SCREWS & WASHERS & NUTS

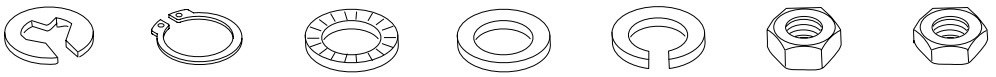


Din 84 **Din 7984** **Din 912** **ULS** **Din 7985** **Din 7991** **Aspa-Screw**



GN615
KM5

Din 913 **Din 914** **Din 915** **Din 916**

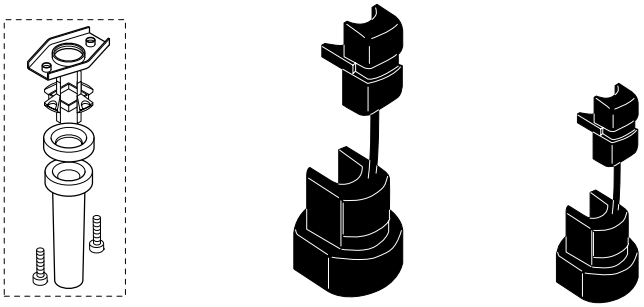


Din 6799 **Din 471** **Din 6798** **Din 125** **Din 127** **Din 934** **Din 936**

Magnet 3x4
Code 7841020

Plate nut M5

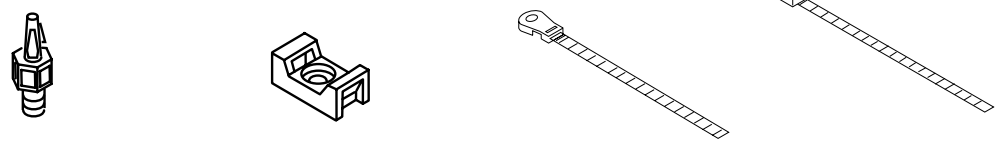
Plate nut M3



Strain reliefer

Grommet SRB-R8
code 7851019

Grommet SRB-R6
code 7851011



Plastic PCB clip **Cable tie holder** **Cable tie holder** **Plastic able tie**

4.1 Screws

Part no.	Description
7251265	Screw M2.5X6 DIN 912
7251306	Screw M3X6 DIN 912
7251310	Screw M3x10 DIN 912
7251316	Screw M3x16 DIN 912
7251406	Screw M4x6 DIN 912
7251408	Screw M4x8 DIN 912
7251410	Screw M4x10 DIN 912
7251412	Screw M4x12 DIN 912
7251416	Screw M4x16 DIN 912
7251422	Screw M4x22 DIN 912
7251512	Screw M5x12 DIN 912
7251514	Screw M5x14 DIN 912
7251516	Screw M5x16 DIN 912
7251520	Screw M5x20 DIN 912
7251525	Screw M5x25 DIN 912
7251620	Screw M6x20 DIN 912
7251630	Screw M6x30 DIN 912
7251635	Screw M6x35 DIN 912
7251820	Screw M8x20 DIN 912
7251825	Screw M8x25 DIN 912
7251016	Screw M10x16 DIN 912
7251035	Screw M10x35 DIN 912
7251250	Screw M12x50 DIN 912
7252306	Screw M3x6 DIN 7991
7252312	Screw M3x12 DIN 7991
7252320	Screw M3x20 DIN 7991
7257408	Screw M4x6 DIN 7991
7253408	Screw M4x8 DIN 7991
7252410	Screw M4x10 DIN 7991
7252412	Screw M4x12 DIN 7991
7252416	Screw M4x16 DIN 7991
7252420	Screw M4x20 DIN 7991
7252516	Screw M5x16 DIN 7991
7252545	Screw M5x45 DIN 7991
7252610	Screw M6x10 DIN 7991
7252616	Screw M6x16 DIN 7991
7257630	Screw M6x30 DIN 7991
7257304	Screw M3x5 ULS
7257306	Screw M3x6 ULS
7257038	Screw M3x8 ULS
7257406	Screw M4x6 ULS
7257408	Screw M4x8 ULS
7257411	Screw M4x10 ULS
7257413	Screw M4x12 ULS
7257518	Screw M5x18 ULS
7251446	Screw M4x6 DIN 7984
7251448	Screw M4x8 DIN 7984
7251447	Screw M4x10 DIN 7984
7251825	Screw M8x25 DIN 7984
7257311	Screw M2.9x13 DIN 7981
7257309	Screw M3.5x13 DIN 7981

Part no.	Description
7253428	Screw M6x12 DIN 913
7253426	Screw M6x20 DIN 913
7253448	Screw M4x8 DIN 914
7253303	Screw M3x3 DIN 916
7253304	Screw M3x4 DIN 916
7253404	Screw M4x4 DIN 916
7253408	Screw M4x8 DIN 916
7253508	Screw M5x8 DIN 916
7253620	Screw M6x20 DIN 916
7257254	Screw M2.5x4 DIN 7985
7257410	Screw M4x10 DIN 933
7257416	Screw M4x16 DIN 965

4.2 Washers

Part no.	Description
7255014	Washer ø4mm DIN 6798
7255015	Washer ø5mm DIN 6798
7255016	Washer ø6mm DIN 6798
7255010	Washer ø10mm DIN 6798
7255003	Washer ø3mm DIN 125
7255004	Washer ø4mm DIN 125
7255005	Washer ø5mm DIN 125
7255006	Washer ø6mm DIN 125
7255008	Washer ø8mm DIN 125

4.3 Lock washers

Part no.	Description
7256008	Lock washer ø8mm DIN 471
7256010	Lock washer ø10mm DIN 471
7256061	Lock washer ø16mm DIN 471
7256025	Lock washer ø25mm DIN 471
7257005	Lock washer ø5mm DIN 6799
7256006	Lock washer ø6mm DIN 6799

4.4 Nuts

Part no.	Description
7254003	Nut M3 DIN 934
7254004	Nut M4 DIN 934
7254006	Nut M6 DIN 934
7254033	Nut M4 DIN 985
7254035	Nut M5 DIN 985
7254011	Nut M10 DIN 985
7254039	Nut M12 DIN 985
7254008	Nut M8 DIN 936
7254101	Nut M16 DIN 936

5 SCREW SET, CODE 7714100

Part no	Description	Pcs	
7251306	Screw 3x6 Din 912	10	
7251316	Screw 3x16 Din 912	10	
7251410	Screw 4X8 Din 912	10	
7251416	Screw 4x16 Din 912	10	
7252306	Screw 3x6 Din 7991	10	
7252312	Screw 3x12 Din 7991	10	
7252410	Screw 4x10 Din 912	10	
7252416	Screw 4x16 Din 912	10	
7252420	Screw 4x20 Din 912	10	
7252516	Screw 5x16 Din 912	10	
7252616	Screw 6x16 Din 912	10	
7251446	Screw 4x6 Din 7984	10	
7257408	Screw 4x8 ULS	10	
7257306	Screw 3x6 ULS	10	
7256008	Circlip ø8mm Din 471	10	
7256010	Circlip ø10mm Din 471	10	
7256061	Circlip ø16mm Din 471	10	
7256025	Circlip ø25mm Din 471	5	
7257005	Circlip ø5mm Din 6799	10	
7257006	Circlip ø6mm Din 6799	10	
7254004	Nut M4 Din 934	10	
7255208	Washer 0.2x8x14	10	
7255162	Washer 0.2x16x22	10	
7255023	Plate nut M3	4	
7255025	Plate nut M5	2	

Chapter

D

MECHANICAL PARTS & MOTORS

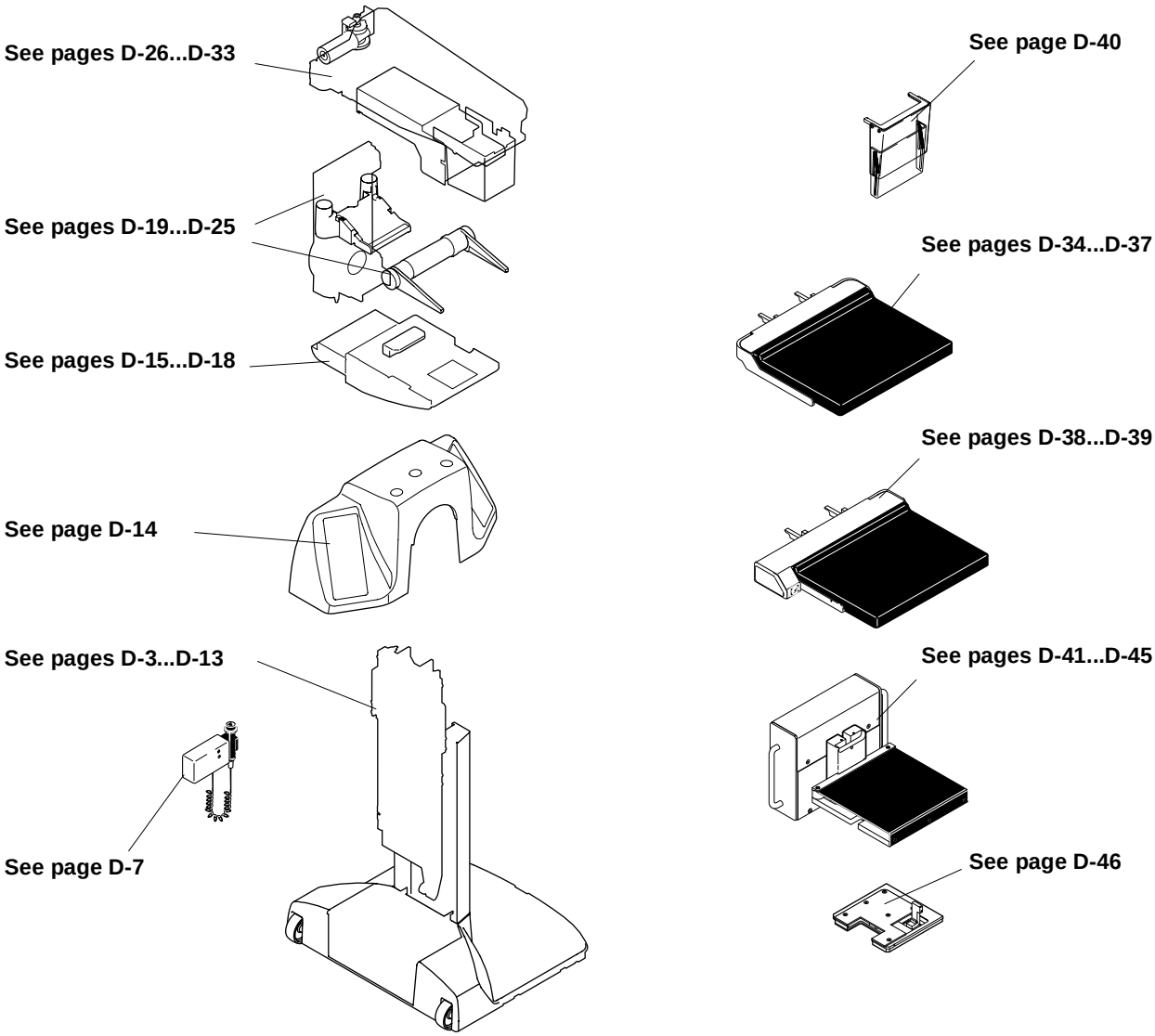
1 GENERAL

This chapter contains all mechanical parts in the unit, including motors and pc-boards, however more detailed views of the pc-boards and wires can be found in Chapter E, “PCB´s & Cables & Sensors”. This chapter is divided as follows:

- For parts in the BASE of the unit, please see D-3
- For parts in the STATIONARY COLUMN, please see D-9
- For parts in the TELESCOPIC COLUMN, please see D-10
- For parts in the HOOD (the top cover of the column), please see D-14
- For parts in the C-ARM, please see D-15
-

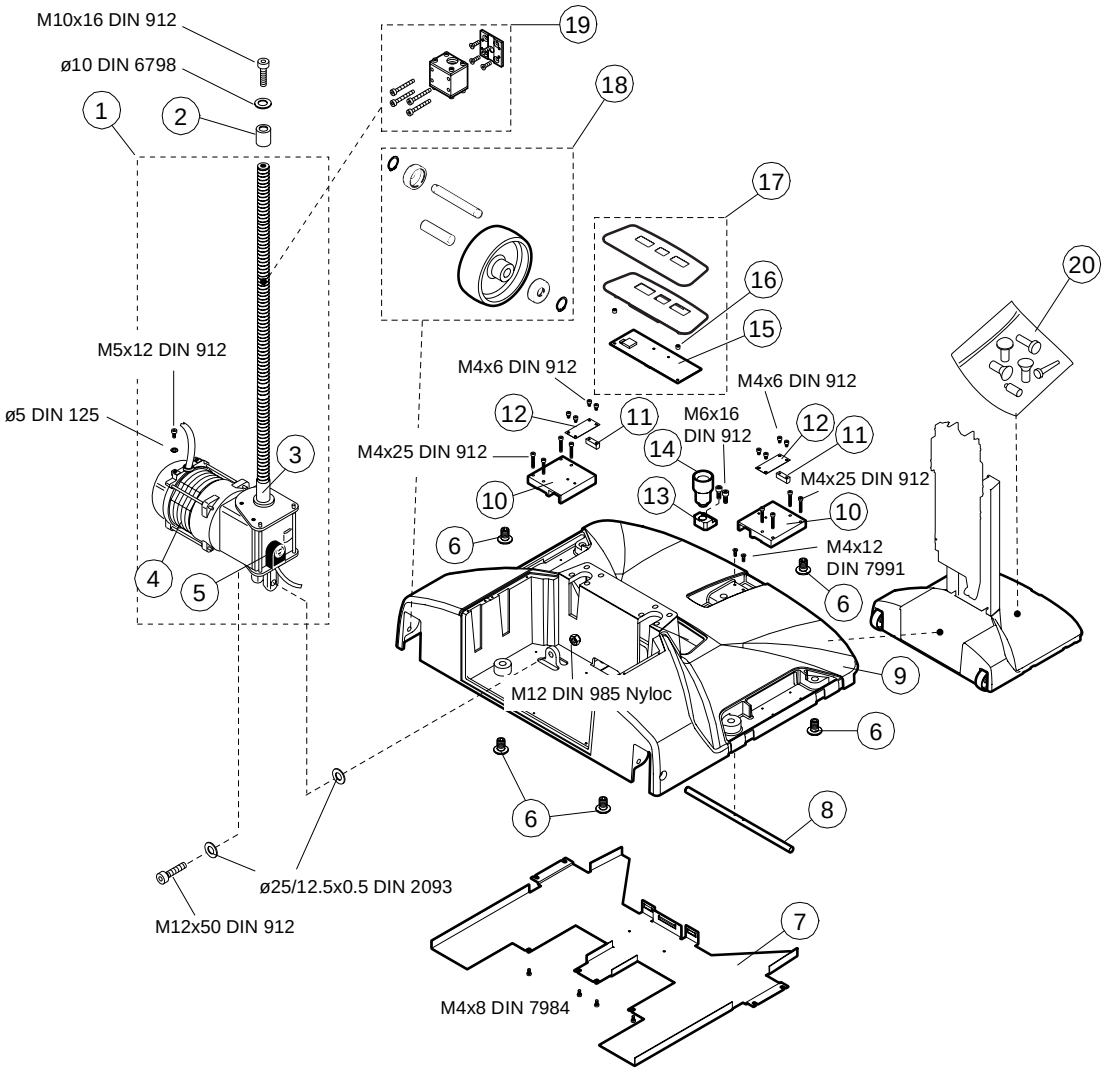
For drawings of all covers, please refer to Chapter-C, "COVERS & SCREWS".

2 COLUMN AND C-ARM ASSEMBLIES



3 UNIT BASE

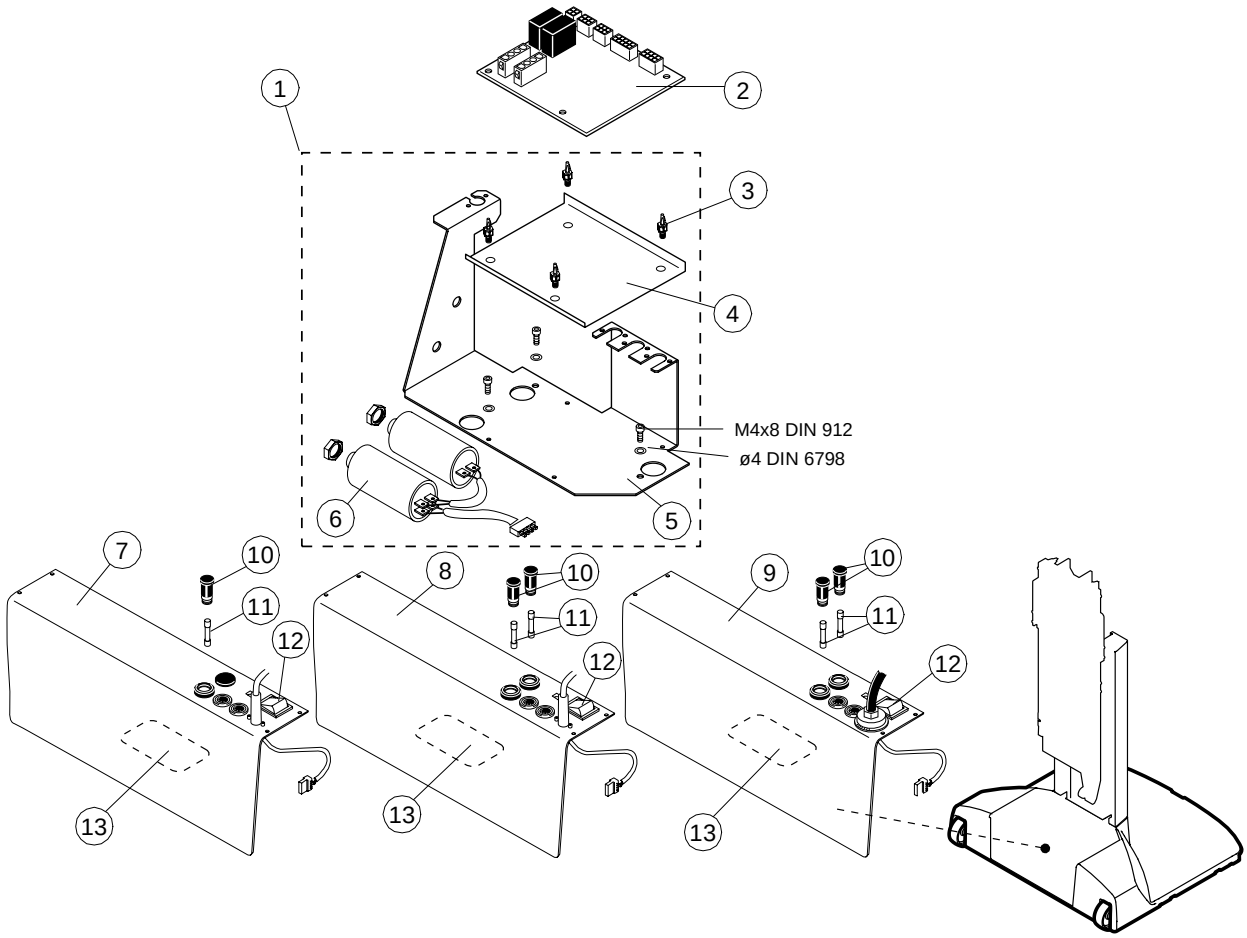
3.1 Base casting assembly & wheels



Ref	Part no.	Description
1	**7617207**	**Lift motor assembly (complete)**
2	7513172	Worm-screw cap
3	7513176	Spacer
4	7517311	Lift motor(with gearbox and worm-screw)
5	**7831012**	**Rotation sensor assy HEDS5500 A11**
6	7517806	Levelling foot
7	7517803	Bottom plate
8	7517807	Lifting handle
9	7527802	Base
10	7517814	Guide block
11	7517818	Friction piece
12	7517809	Friction spring
13	7517826	Locking knob adjuster
14	7527232	C-arm locking knob
15	7810033	Base display PCB
16	7517823	Display spacing bush

Ref	Part no.	Description
17	**7617162**	**Base display assembly**
18	**7617106**	**Wheel assembly (wheel, axle, bearings and locking washers)**
19	**7617120**	**Lift motor warm screw nut assembly**
20	7714101	Screw set

3.2 Base rear cover & electrical assembly

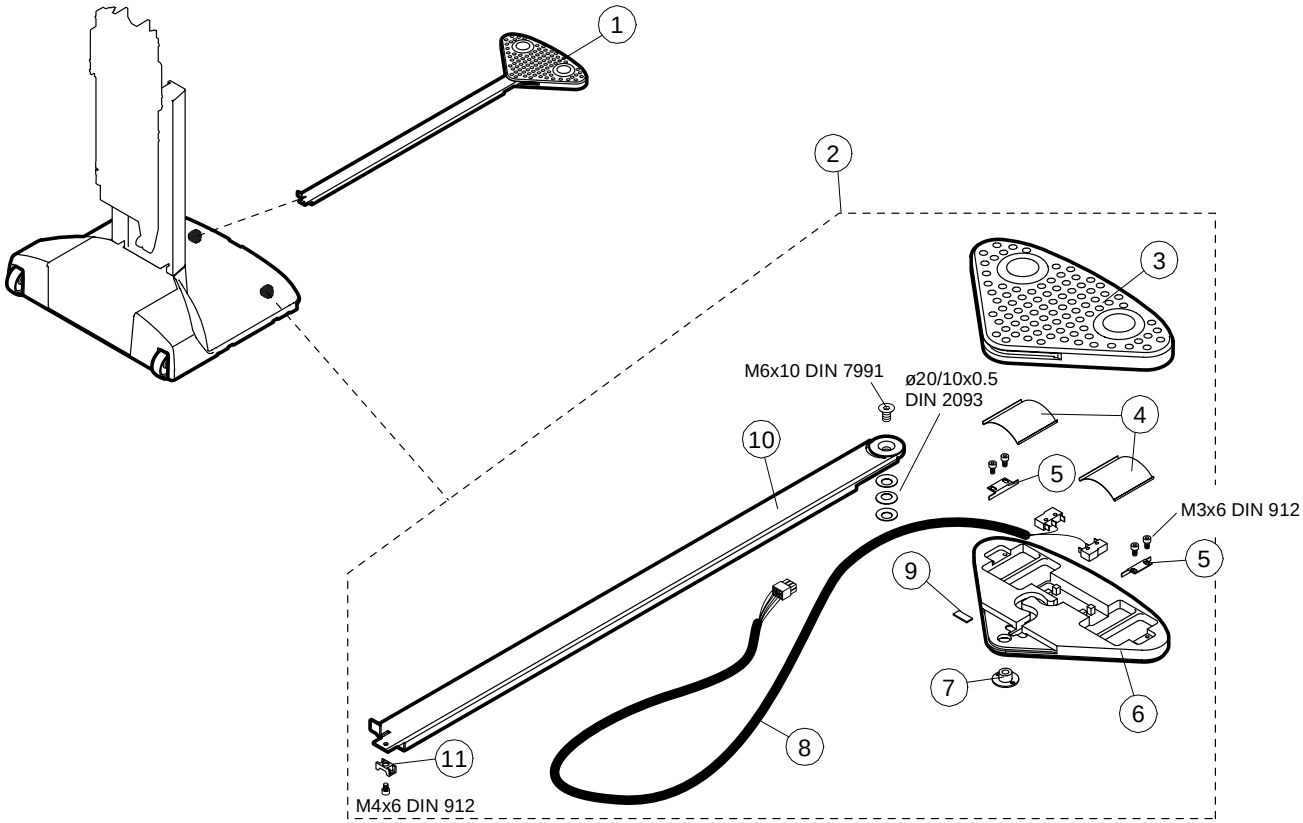


Ref	Part no.	Description
1	**7617108**	**Base electrical assembly (complete as shown)**
2	7810001	Base PCB
3	7851014	Plastic PCB clip
4	7517218	Insulation sheet
5	7517211	Base insulation plate
6	**7827740**	**Lift motor capacitor assembly (two capacitors and interconnecting cable)**
7A	**7617104**	**Rear cover assembly (GB)**
7B	**7618104**	**Rear cover assembly, mobile (GB)**
8A	**7617103**	**Rear cover assembly (EUROPE)**
8B	**7618103**	**Rear cover assembly, mobile(EUROPE)**
9A	**7617105**	**Rear cover assembly (USA)**
9B	**7618105**	**Rear cover assembly, mobile (USA)**

Ref	Part no.	Description
10	7851006	Fuse holder cap 6x32 0031.2320
11	7851003	Mains Fuse 15AT (slow blow) 6.3x32mm
12	7831013	Mains switch Marguat 1602-0101
13	7841012	Filter Evox S-171-6

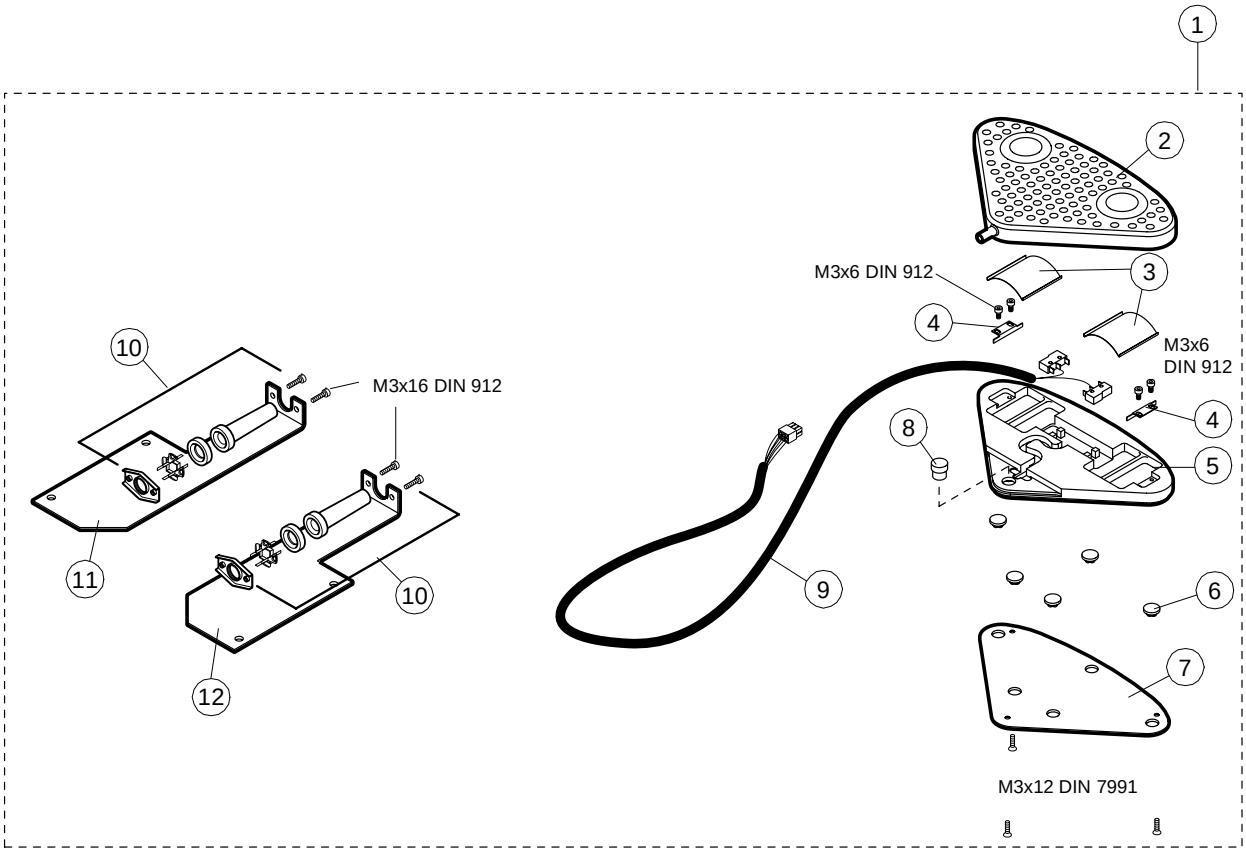
Rear cover assemblies comes complete assembled, including mains cable, mains switch, fuse holders (with fuses), mains filter and interconnecting cables.

3.3 Foot controls



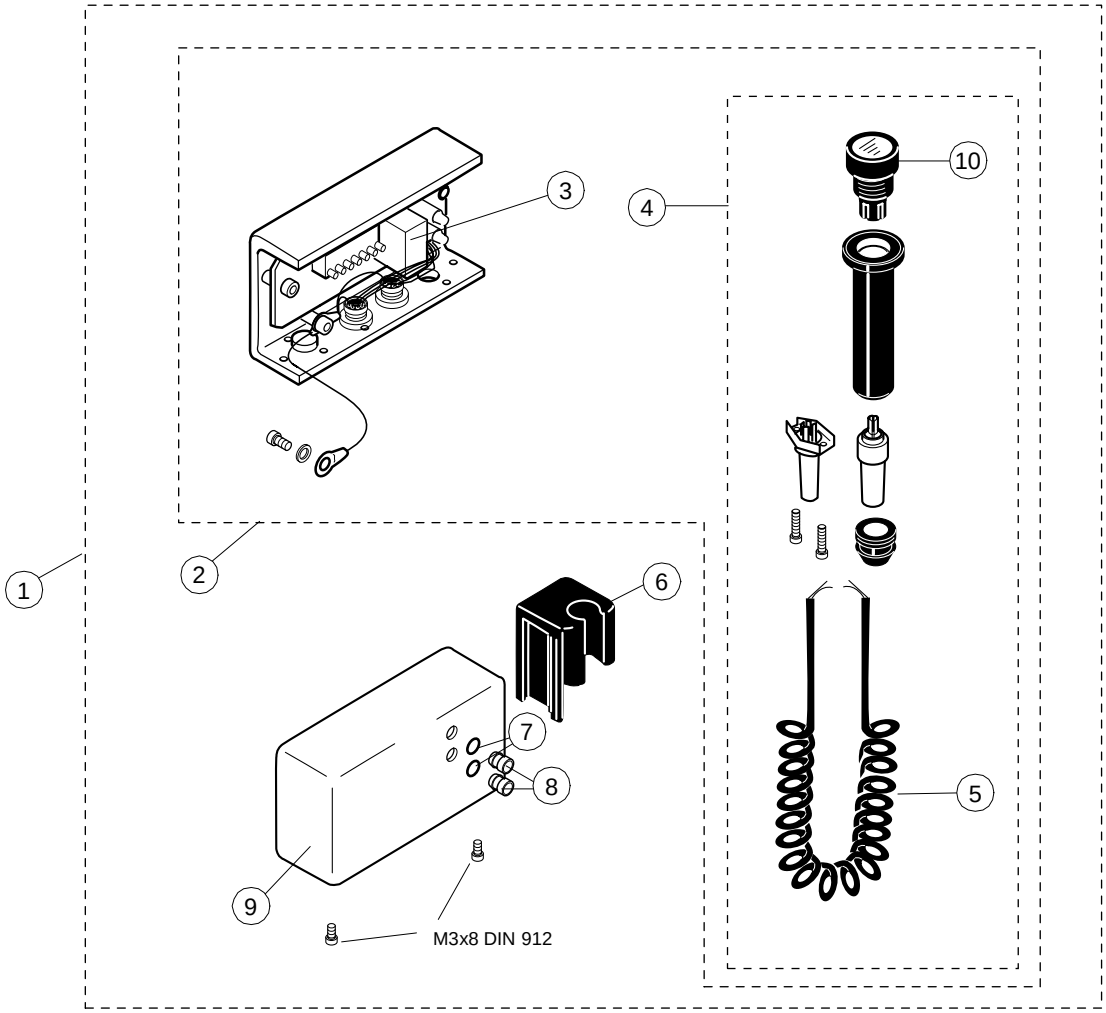
Ref	Part no.	Description
1	**7617160**	**Foot control assembly, right**
2	**7617161**	**Foot control assembly, left**
3	7517817	Foot control cover (arm model)
4	7517815	Foot control spring
5	7517824	Spring guide
6	7517810	Foot control casing
7	7517821	Bushing
8	7827809	L & R Footcontrol cable TM
9	7517825	Cable shield
10	7517811	Arm assembly
11	7851012	Cable tie holder

3.4 Trailing foot control



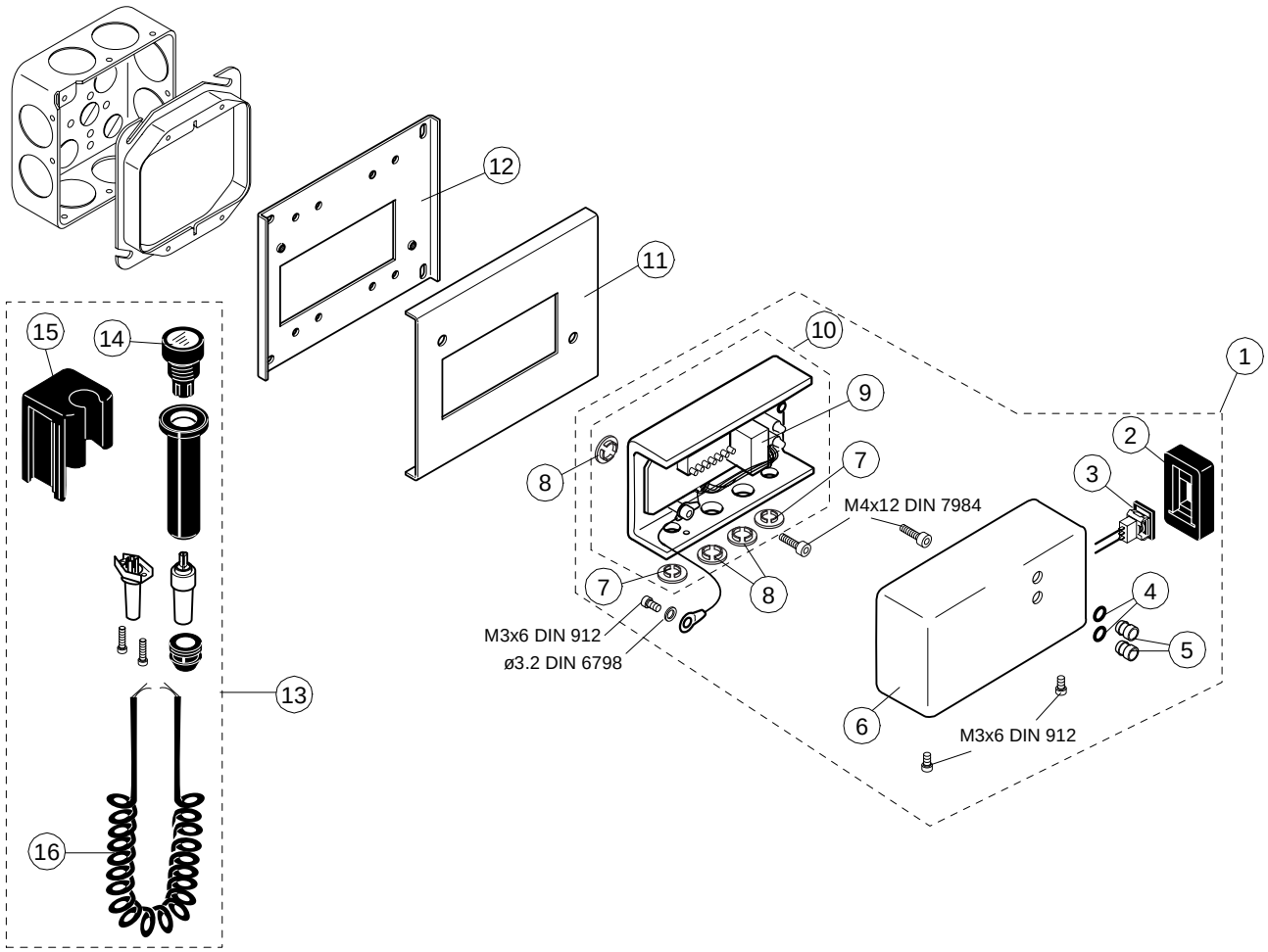
Ref	Part no.	Description
1A	**7617165**	**Foot control assembly, right**
1B	**7617166**	**Foot control assembly, left**
2	7517827	Foot control cover (trailing model)
3	7517815	Foot control spring
4	7517824	Spring guide
5	7517810	Foot control casting
6	2524446	Rubber pad
7	7527820	Bottom plate
8	7517822	Support knob
9	7827808	L & R Footcontrol cable LM
10	7851018	Strain reliefer HSUF1
11	7517819	Strain reliefer plate, right
12	7537819	Strain reliefer plate, left

3.5 Exposure switch assembly



Ref	Part no.	Description
1	**0665081**	**Exposure switch, complete**
2	**0050877**	**Exposure switch frame assembly. Includes preassembled parts 1, 2, 3 and 4**
3	7810040	Exposure control PCB
4	**0471014**	**Exposure switch cable assembly (complete,preassembled at factory)**
5	0006184	Spiral cable (cable only)
6	0650002	Switch holder
7	0524003	O-ring ø5.3x2.4 EPDM
8	0436008	Led sleeve
9	0655067	Mammographic remote control cover
10	**7617110**	**Switch assy EAO 14.131**

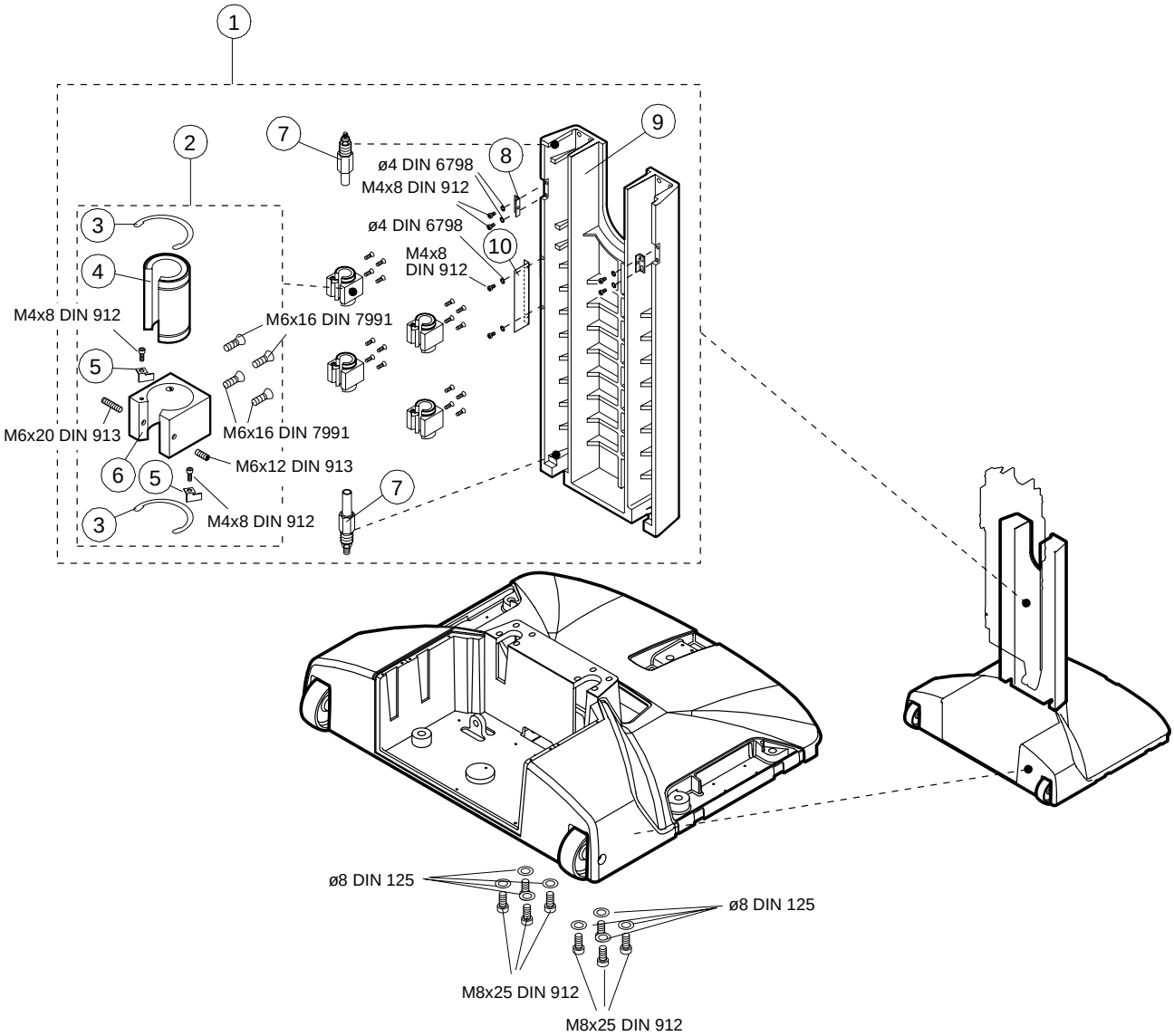
3.6 Exposure switch assembly, USA



Ref	Part no.	Description
1	**0665159**	**Exposure switch assembly, USA**
2	0652520	Switch rubber
3	0637130	Switch
4	0524003	O-ring 5.3x2.4 EPDM
5	0436008	Led sleeve
6	0655067	Mammographic remote control cover
7	0652498	Plug, small
8	0652497	Plug, big
9	7810040	Exposure control PCB
10	**0637129**	**Exposure switch base USA**
11	0655103	Adapter upper plate
12	0655102	Adapter lower plate
13	**0471026**	**Exposure switch cable assembly (complete, preassembled at factory)**

Ref	Part no.	Description
14	**7617110**	**Switch assy EAO 14.131**
15	0650002	Switch holder
16	0006184	Spiral cable (cable only)

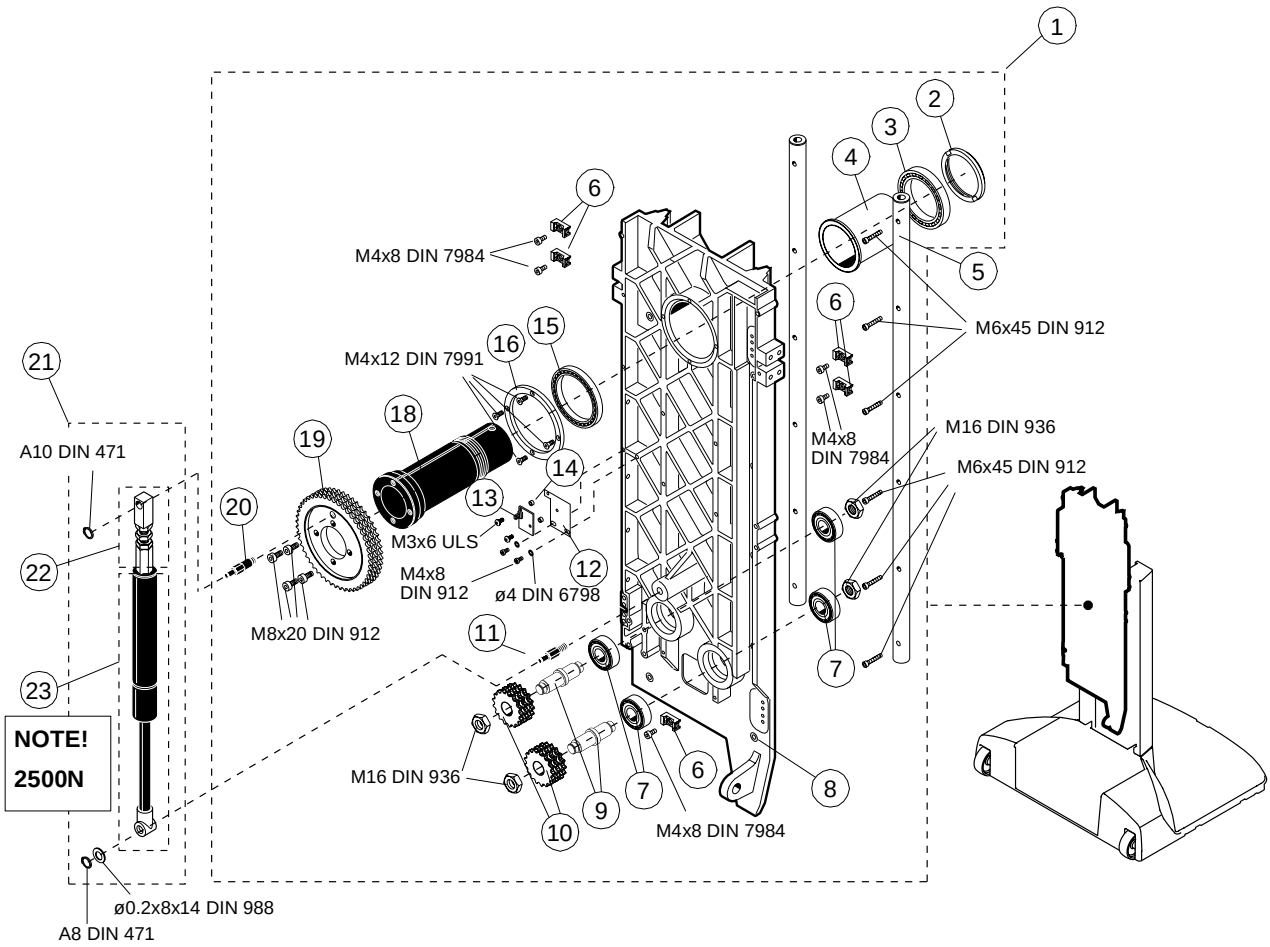
4 STATIONARY COLUMN



Ref	Part no.	Description
1	**7617200**	**Stationary column assembly (complete column witch pre-installed parts as shown)**
2	**7617111**	**Linear ball-bearing assembly**
3	7256040	Locking ring
4	7211002	Linear ball-bearing LBE 250P/LBLT25
5	7517312	Bearing locking bracket
6	7517310	Ball bearing holder
7	7617410	Magnet holder (short model)
8	7517229	Column rear cover fastening plate
9	7527101	Column casting
10	7513169	Opto detector plate

5 TELESCOPIC COLUMN

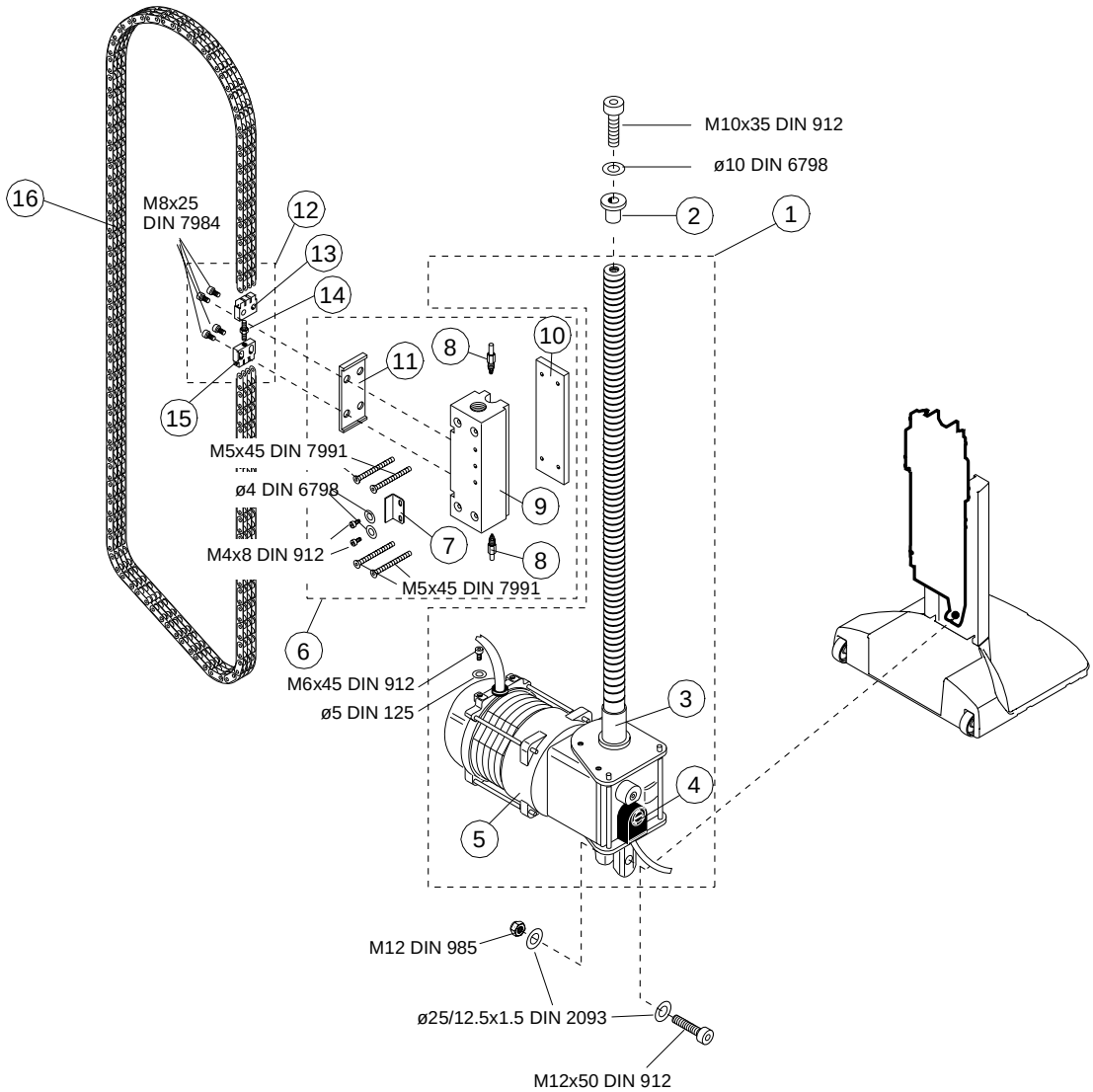
5.1 Bearings & cogwheels & gas-spring



Ref	Part no.	Description
1	**7613200**	**Telescopic column assembly (complete as illustrated)**
2	7513152	Bearing adjusting ring
3	7211012	C-arm axle outer bearing 61913/C3
4	7513154	Spacer bushing
5	7513111	Linear bearing bar
6	7851012	Cable tie holder
7	7211014	Lower chainwheel bearing 6204
8	7523101	Telescopic column casting
9	7513129	Lower chainwheel axle
10	7513128	Lower chainwheel
11	7513118	Gas-spring lower axle
12	7513168	Opto fixing plate
13	7810029	Lift ref. PCB
14	7211075	Spacer
15	7211011	C-arm axle inner bearing 61815
16	7513153	C-arm bearing holding plate

Ref	Part no.	Description
18	7513151	C-arm rotation axle
19	7513119	Upper chainwheel
20	7513117	Gas-spring upper axle
21	**7613206**	**Complete gas-spring assembly**
22	**7613115**	**Gas-spring tension adjuster assy**
23	**7613212**	**Gas-spring assembly (2500N)**

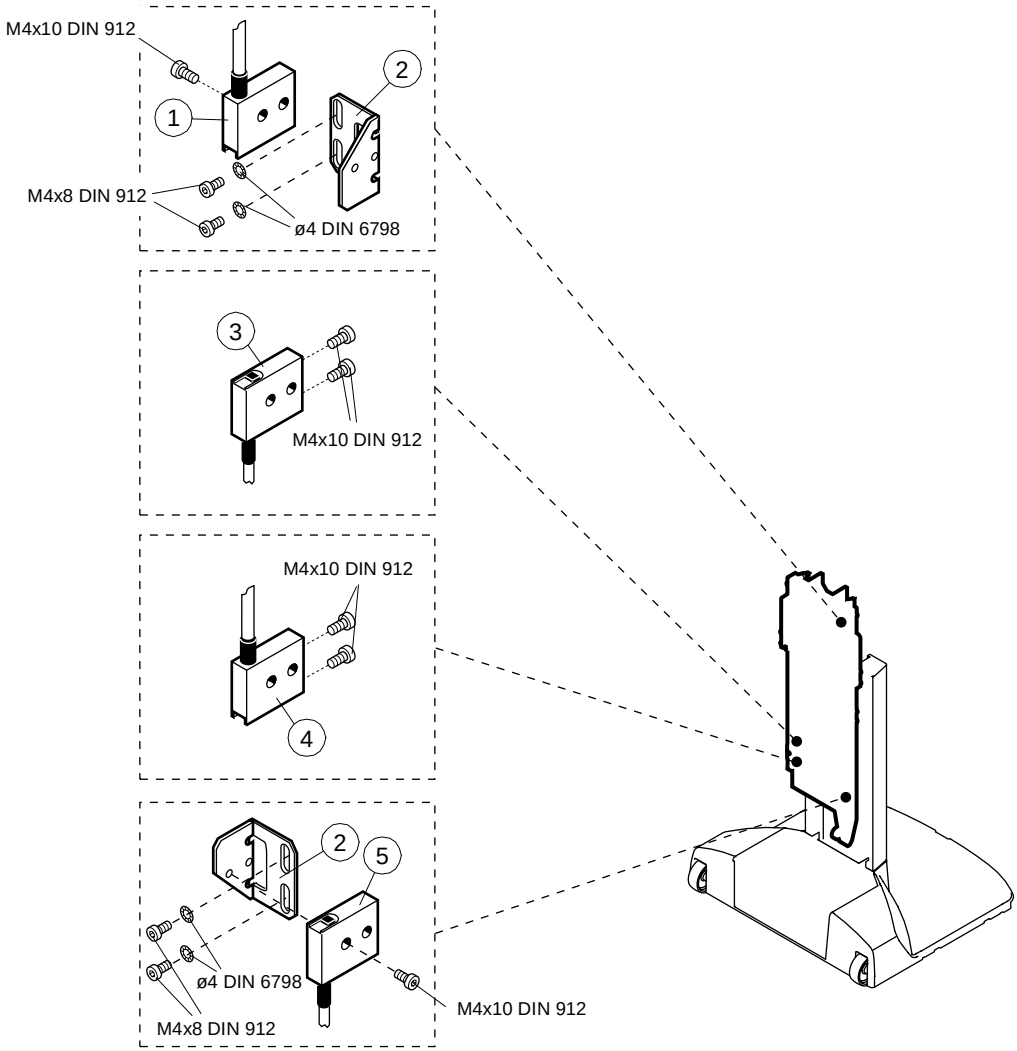
5.2 C-arm rotation motor & chain drive



Ref	Part no.	Description
1	**7613204**	**Rotation motor assembly (complete as illustrated)**
2	7513178	Stopping collar
3	7513175	Spacer
4	**7831012**	**Rotation sensor assy HEDS5500 A11**
5	7513261	C-arm rotation AC-motor (with integral gearbox and worm-screw)
6	**7613203**	**Worm screw nut assembly (complete as illustrated)**
7	7513412	Sensor beam interrupter bracket
8	7617410	Magnet holder, short

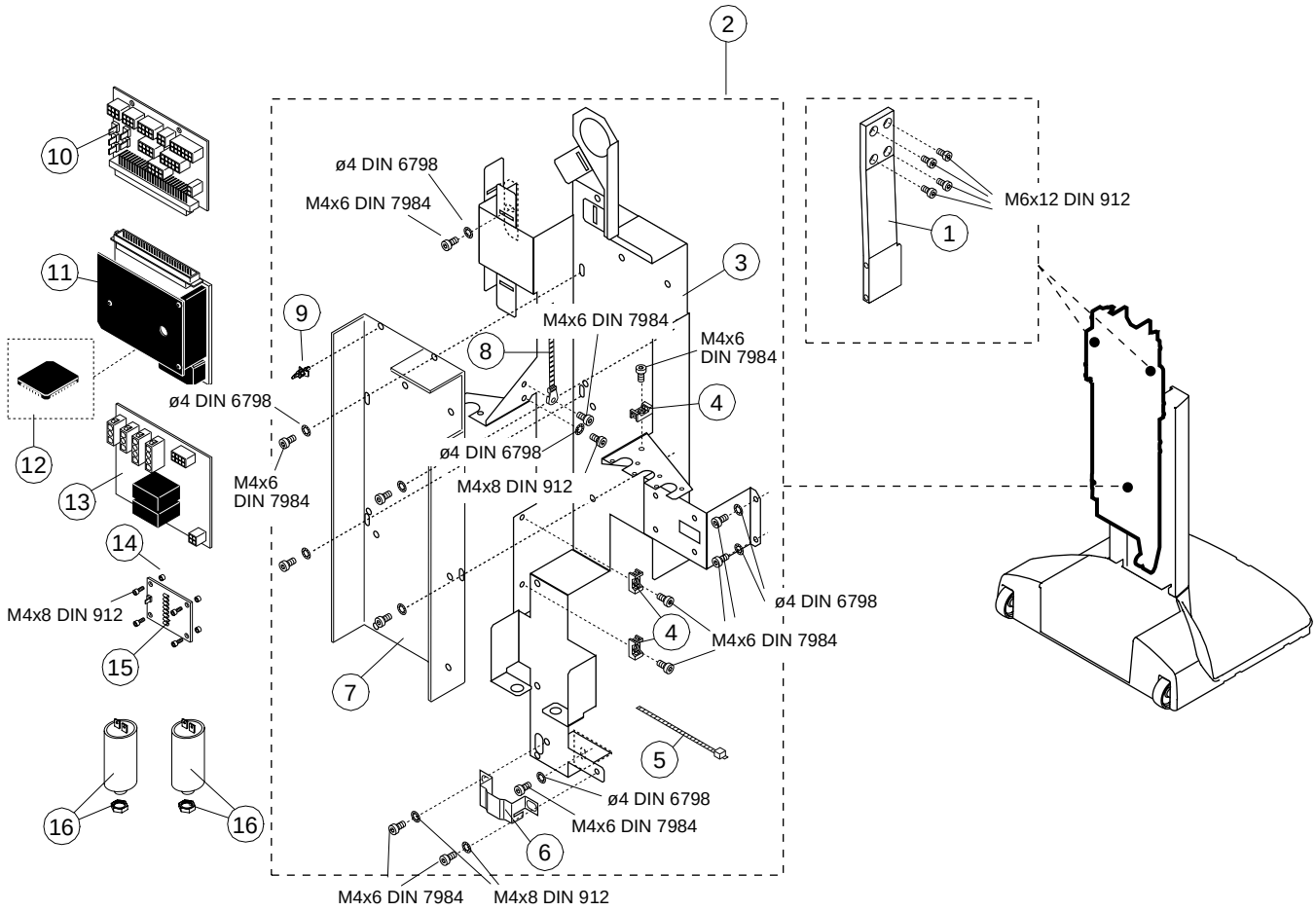
Ref	Part no.	Description
9	7513148	Worm screw nut
10	7513146	Guide plate
11	7513145	Chain link plate
12	**7613102**	**Chain assembly**
13	7513143	Stationary link piece
14	7513147	Chain tensioning screw
15	7513144	Adjustable chain link
16	7211041	Drive chain 2193/06B3 (complete chain)

5.3 Telescopic column hall sensors



Ref	Part no.	Description
1	7827742	Rotation bottom Hall-sensor
2	7513411	Hall detector bracket
3	7827741	Lift up Hall-sensor
4	7827749	Lift down Hall-sensor
5	7827739	Rotation up Hall-sensor

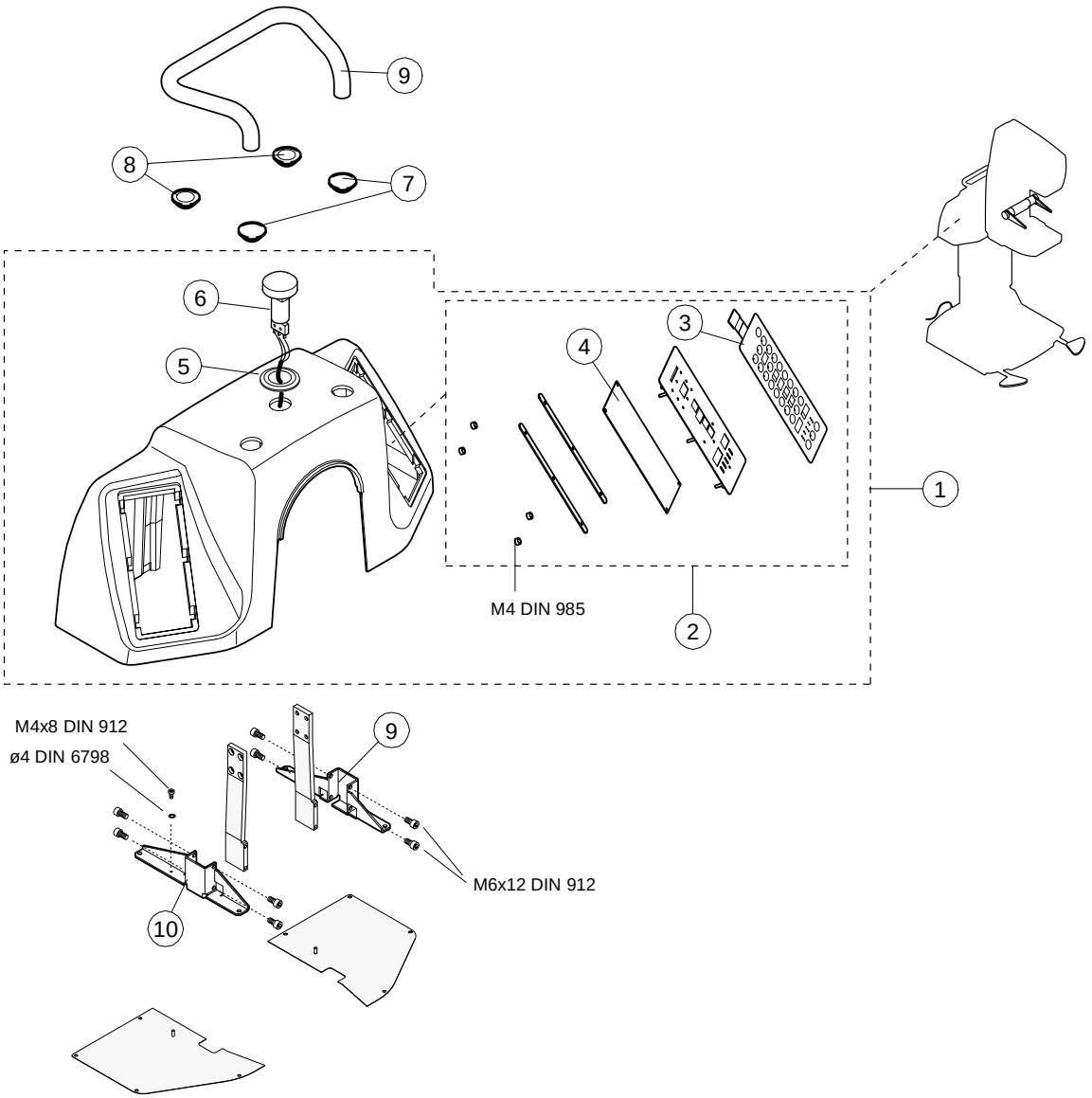
5.4 Metal frame & electronics



Ref	Part no.	Description
1A	7513130	Fastening plta, right
1B	7533130	Fastening plta, left
2	**7613214**	**Complete telescopic column electronics installation (no cables)**
3	7513315	Telescopic column installation plate
4	7851012	Cable tie holder
5	7831021	Plastic cable tie, are used with item 6
6	7851011	Strain reliefer
7	7513317	Insulation sheet
8	7851018	Cable tie holder
9	7851015	Plastic PCB clip
10	7810003	Rear collector PCB
11	7810004	Rear Cpu PCB
12	7841091	Rear software chip PLCC

Ref	Part no.	Description
13	7810005	Sync PCB (rotation motor controller board)
14	7211075	Plastic spacer
15	7810007	Rotation reference PCB
16	7841002	Rotation motor capacitor 12µF (with nut)

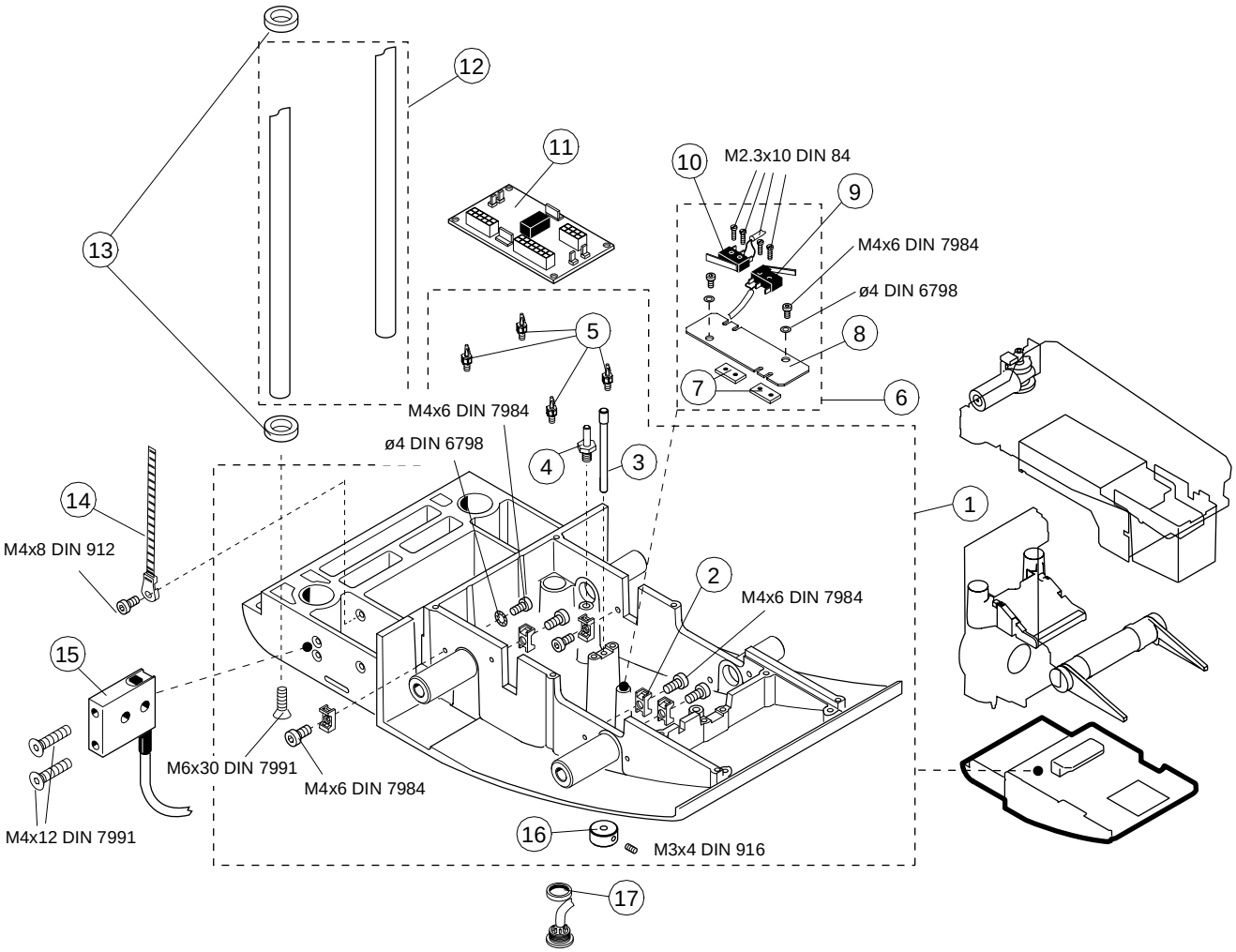
6 HOOD



Ref	Part no.	Description
1	**7613110**	**Hood assembly**
2	**7613109**	**Control panel assembly**
3	7841081	Control panel membrane
4	7810032	Display PCB
5	7519311	Stop switch washer
6	7617170	Stop switch
7	7513268	Transport handle hole cover plug
8	7513269	Sleeve
9	7523112	Transport handle
10	7519302	Hood lug, right
11	7539302	Hood lug, left

7 C-ARM

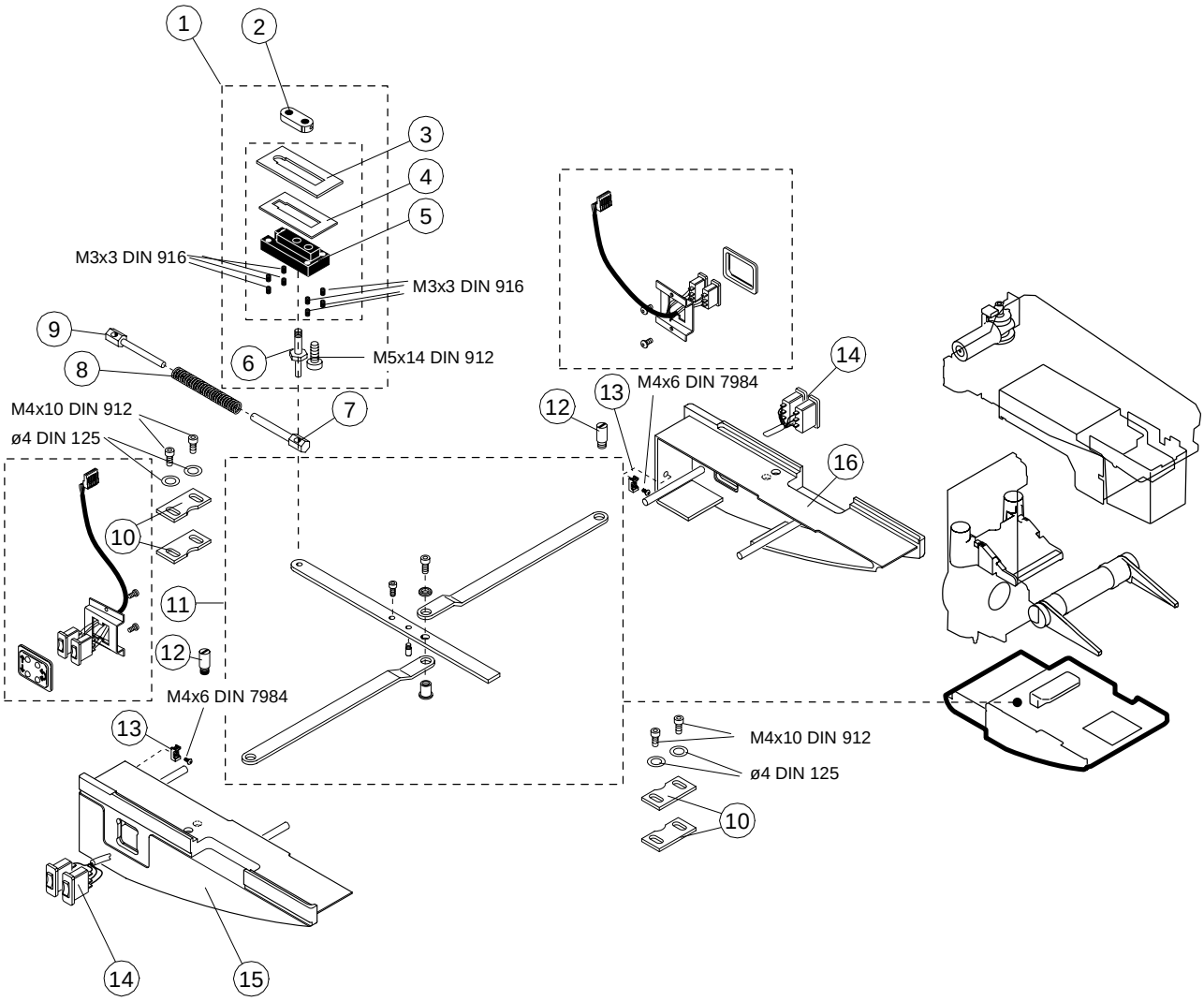
7.1 Cassette table base



Ref	Part no.	Description
1	**7615113**	**Cassette shelf casting assembly**
2	7851012	Cable strip anchor
3	7515606	Locking pin
4	7515519	Cassette mechanism spring pin
5	7851014	Plastic PCB clip
6	**7615119**	**Table position sensing microswitch assembly**
7	7514316	Plate
8	7515516	Microswitch plate
9	**7827750**	**Large cassette microswitch assembly (switch & cable)**
10	**7827731**	**Small cassette microswitch assembly (switch & cable)**
11	7810010	Shelf collector PCB
12	7615205	Linear bearing bar SKF LJT 25x740
13	7516222	Stop bush

Ref	Part no.	Description
14	7851018	Cable tie holder
15	7827747	Mag up hall-sensor
16	7515607	Thumb wheel
17	7827733	Bucky grid control cable

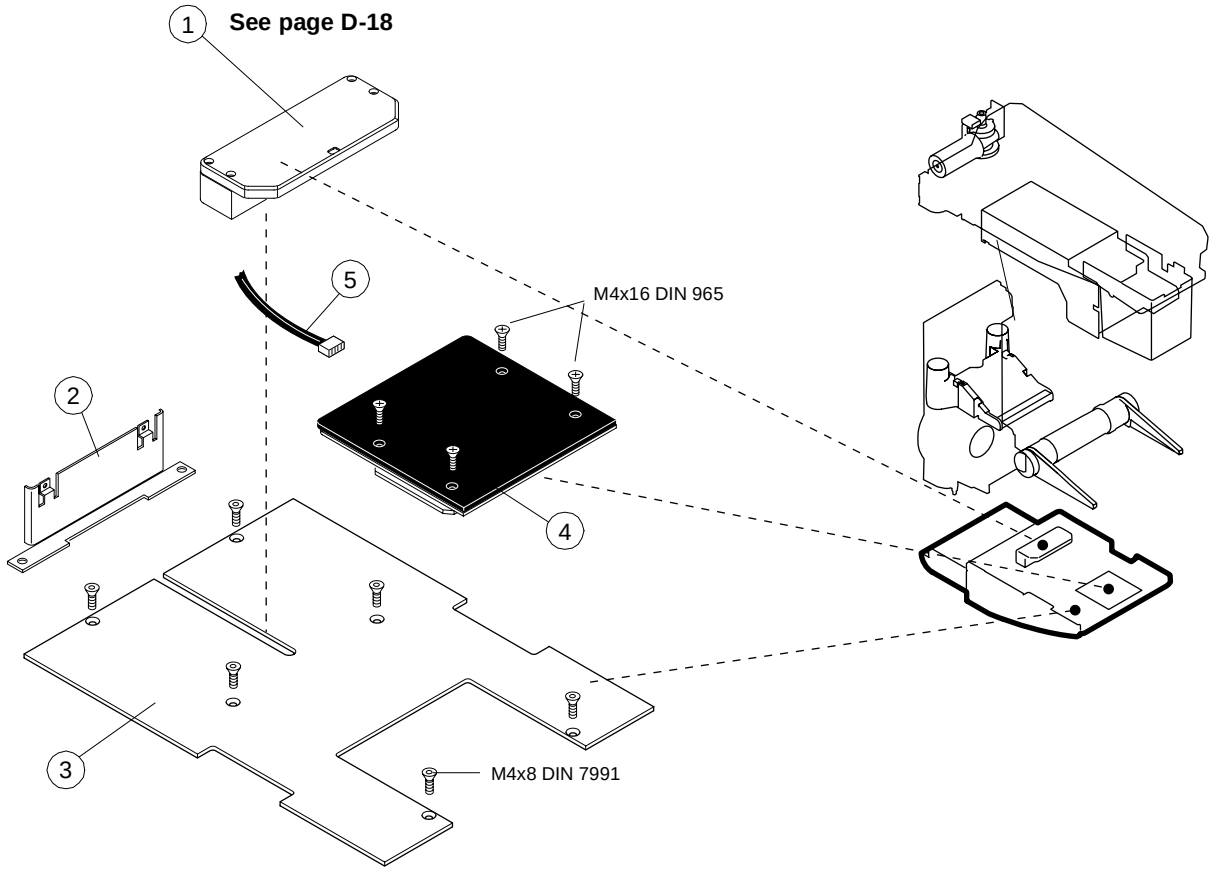
7.2 Cassette table side guides



Ref	Part no.	Description
1	**7615120**	**Labeling head holder assembly (includes items 3...9 pre-assembled)**
2	7515587	Adapter, daylight
3	7515515	Plastic cover
4	7515557	Quide plate
5	7515514	Plastic adapter
6	7515518	Pin
7	7515551	Front axle
8	7515527	Spring
9	7515552	Rear axle
10	7515525	Lever holder
11	**7615121**	**Lever assembly (daylight)**
12	7515524	Bearing screw
13	7851012	Cable tie holder

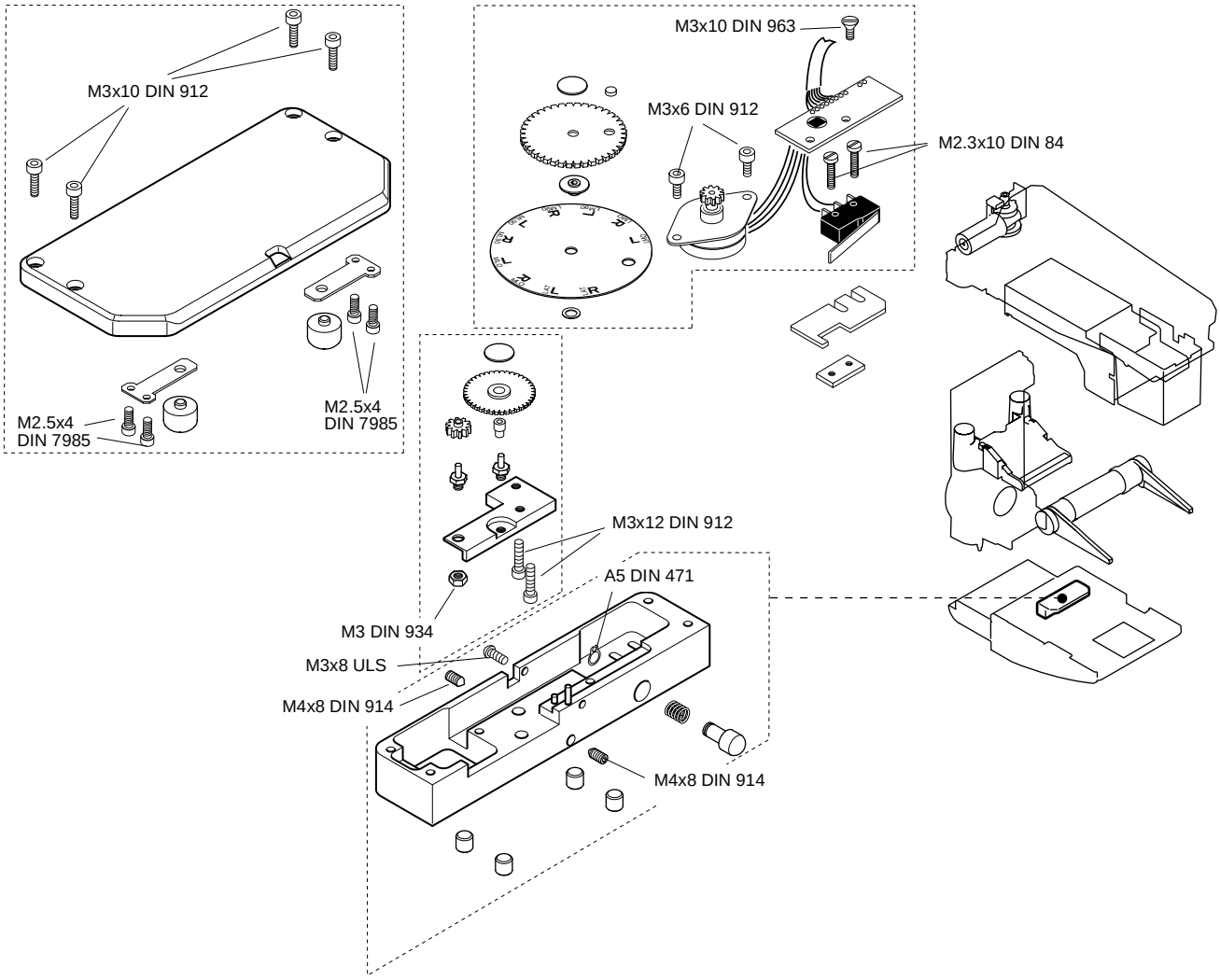
Ref	Part no.	Description
14	7827729	Finger switch assembly (switches and cable)
15	**7615115**	**Left side table guide assembly (day-light)**
16	**7615117**	**Right side table guide assembly (day-light)**

7.3 Cassette table covers

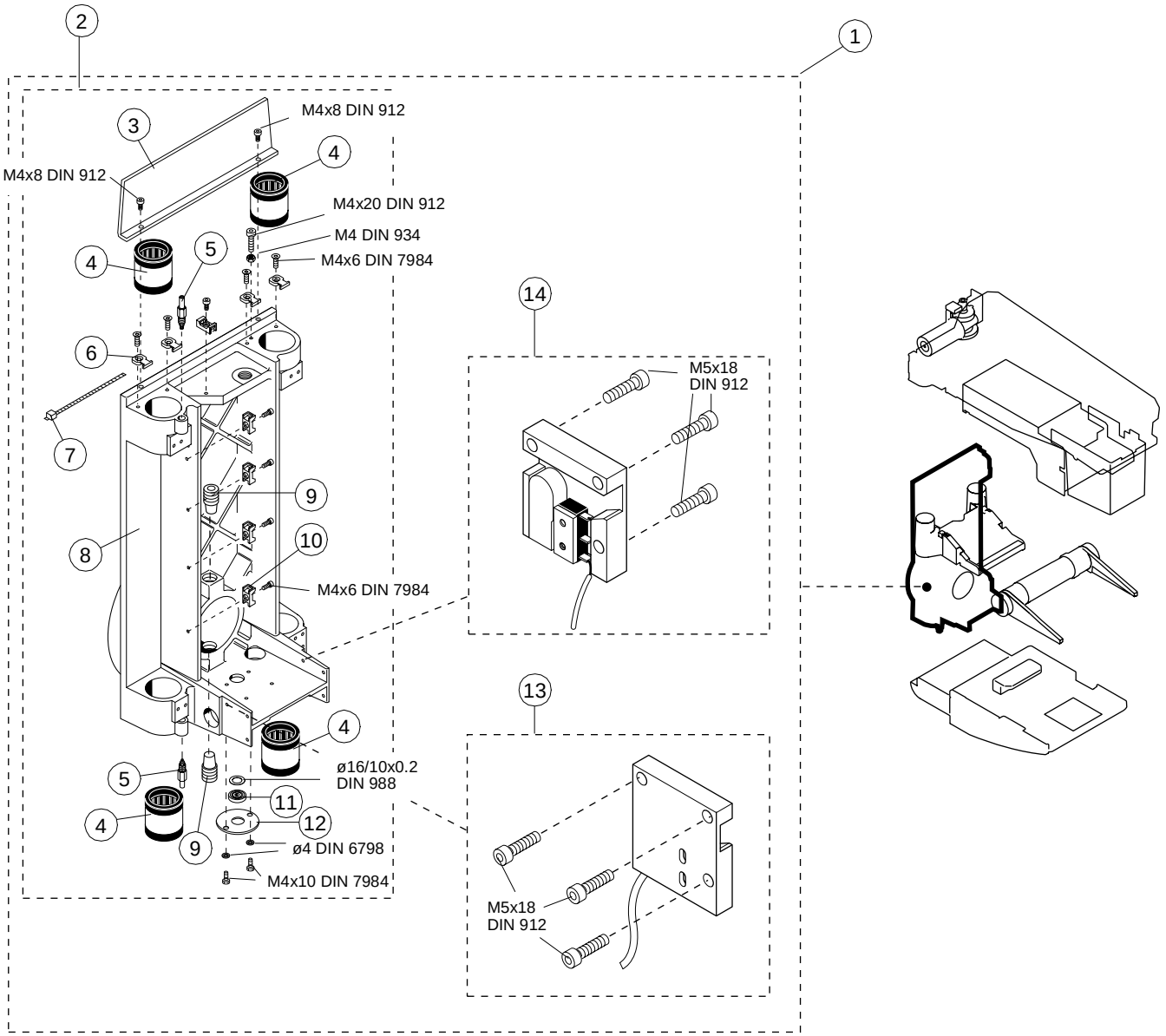


Ref	Part no.	Description
1A	7615131	Labeling head (daylight)
1B	7615137	Labeling head (daylight) France
2	7525365	C-arm vertical cover support plate
3	7615134	Cassette table top cover (daylight)
4	**7615123**	**AEC-sensor assembly**
5	7827727	AEC-cable

7.4 Labeling head

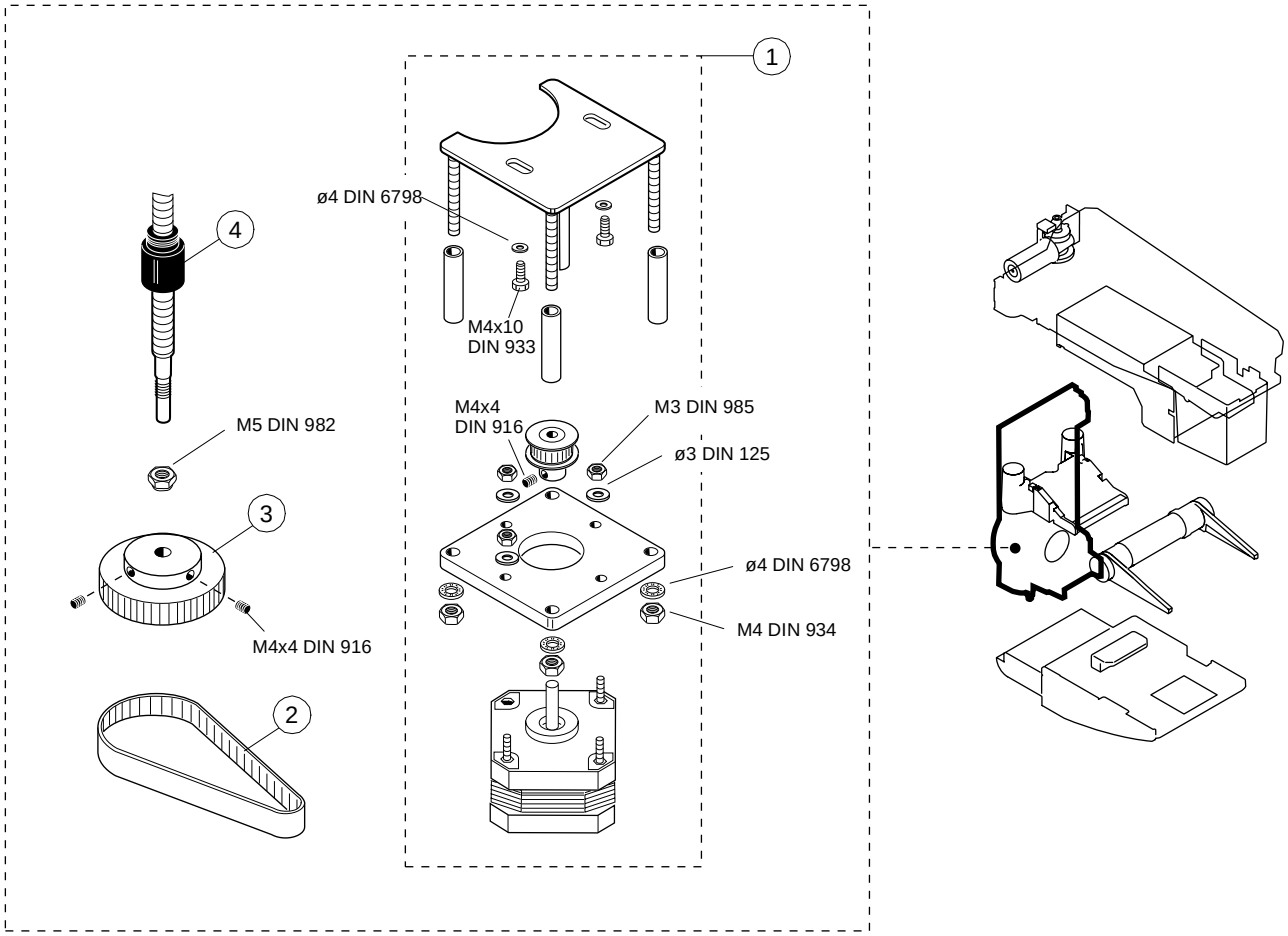


7.5 Center frame bearings & lower compression paddle holders



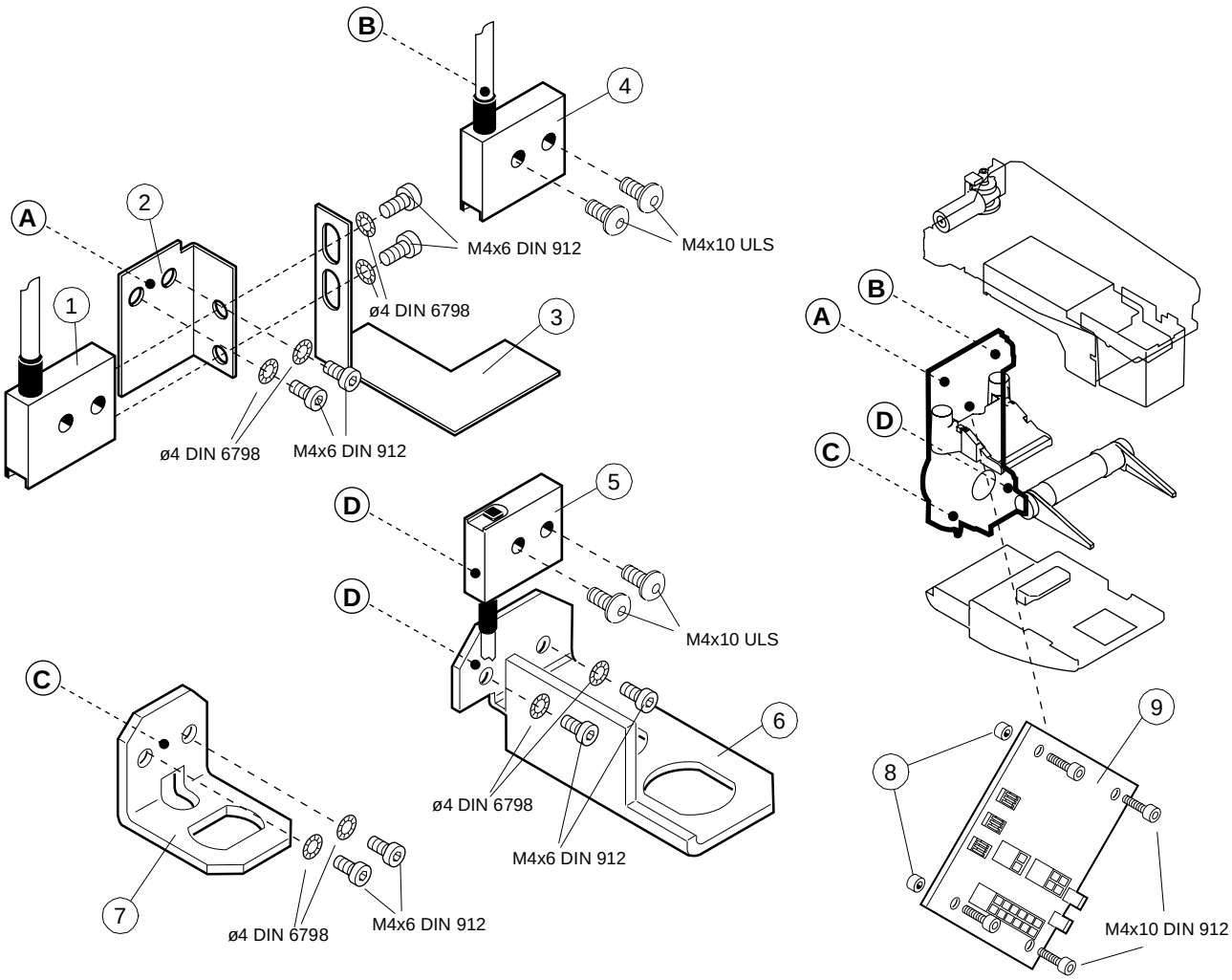
Ref	Part no.	Description
1	**7614201**	**C-arm center frame complete**
2	**7614100**	**C-arm center frame assembly**
3	7524213	Center frame cover plate
4	7211001	Linear ball bearing
5	7617410	Magnet holder & magnet
6	7851016	Cable strip anchor
7	7831021	Plastic cable tie
8	7524101	C-arm center frame casting
9	7513155	C-arm locking bolt
10	7851012	Cable strip anchor
11	7211013	Ball bearing 625-ZZ SNR
12	7514412	Bearing holding bracket
13	**7614104**	**Left lower paddle holder assembly**
14	**7614103**	**Right lower paddle holder assembly**

7.6 Compression motor assembly



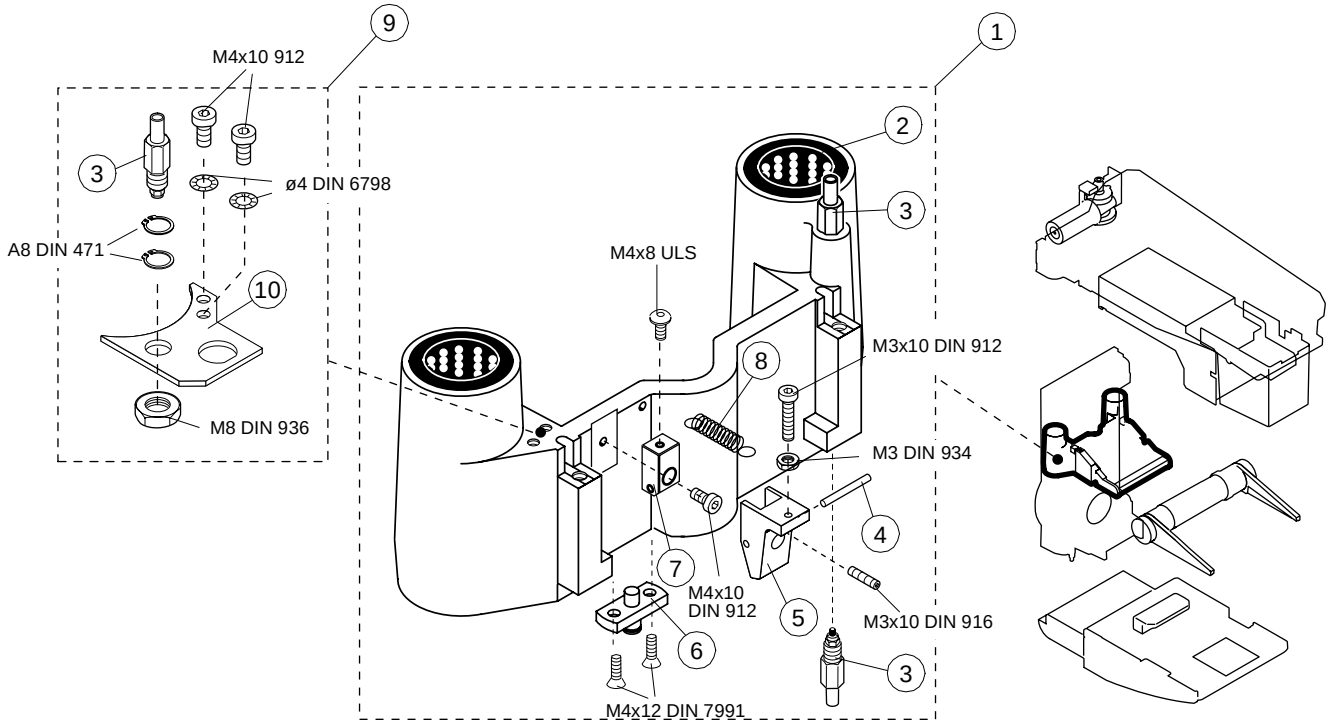
Ref	Part no.	Description
1	**7614102**	**Compression motor assembly**
2	7211087	Drive belt
3	7514415	Worm-screw belt wheel
4	7514414	Compression worm-screw (including worm-screw nut)

7.7 C-arm center frame sensors & pcb



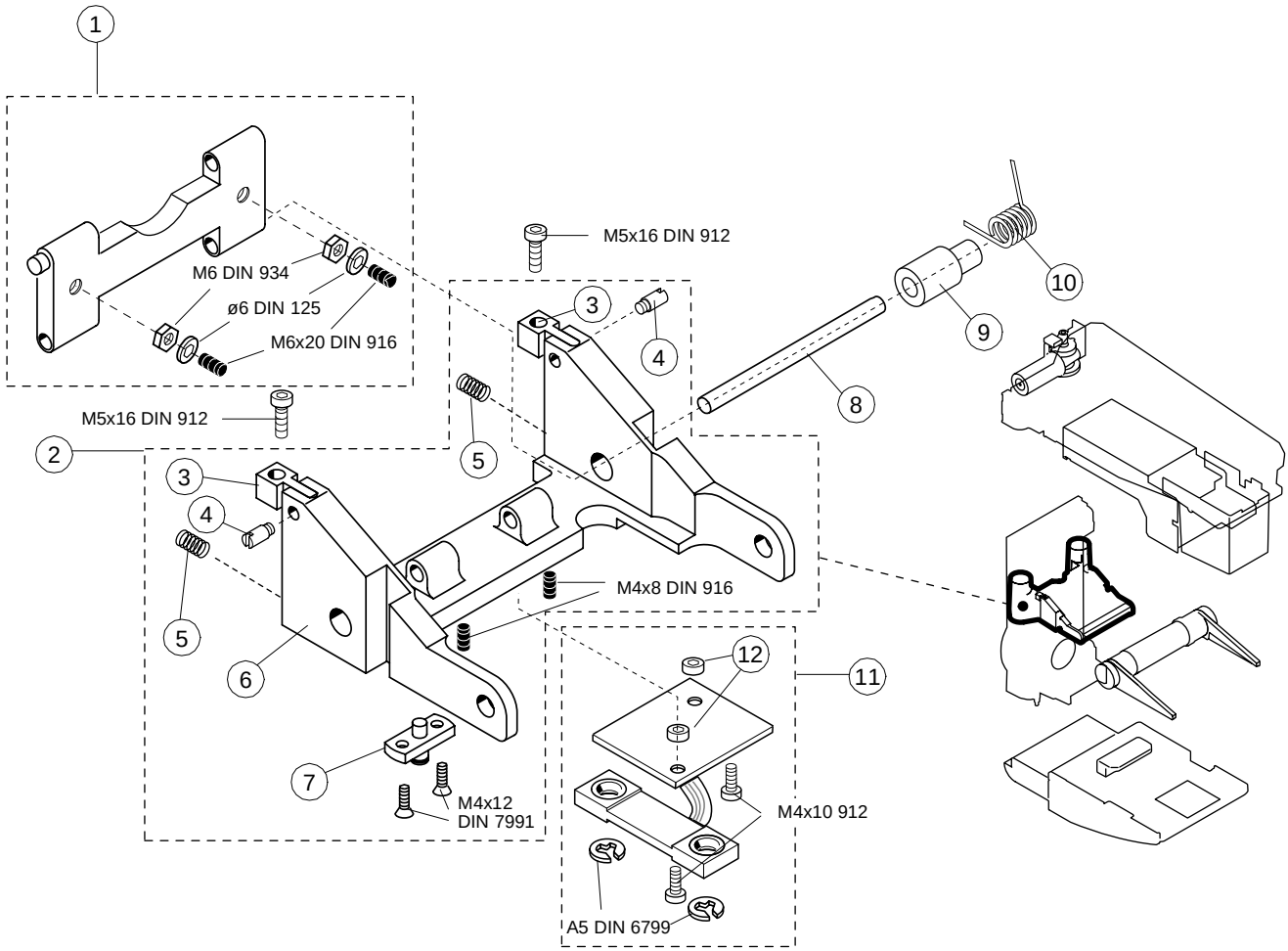
Ref	Part no.	Description
1	7827745	Release hall-sensor
2	7514512	Bracket
3	7516228	Trigger plate
4	7827746	Press up hall-sensor
5	7827744	Press down hall-sensor
6	7514211	Strain relief bracket (long)
7	7514212	Strain relief bracket (short)
8	7211075	Plastic spacer
9	7810006	FRONTCOLLECTOR PCB

7.8 Compression mechanism sledge assembly, code 7616100 (see pages D-23..D-24)



Ref	Part no.	Description
1	**7616201**	**Sledge casting assembly**
2	7616199	Sledge casting (with bearings pre-assembled)
3	7617410	Magnet holder & magnet
4	7211025	ø3x16
5	7516226	Locking mech. trigger
6	7516313	Strain gauge bracket
7	7516227	Locking mech. frame
8	7516220	Spring
9	**7616102**	**Cable bracket assembly**
10	7516224	Cable bracket

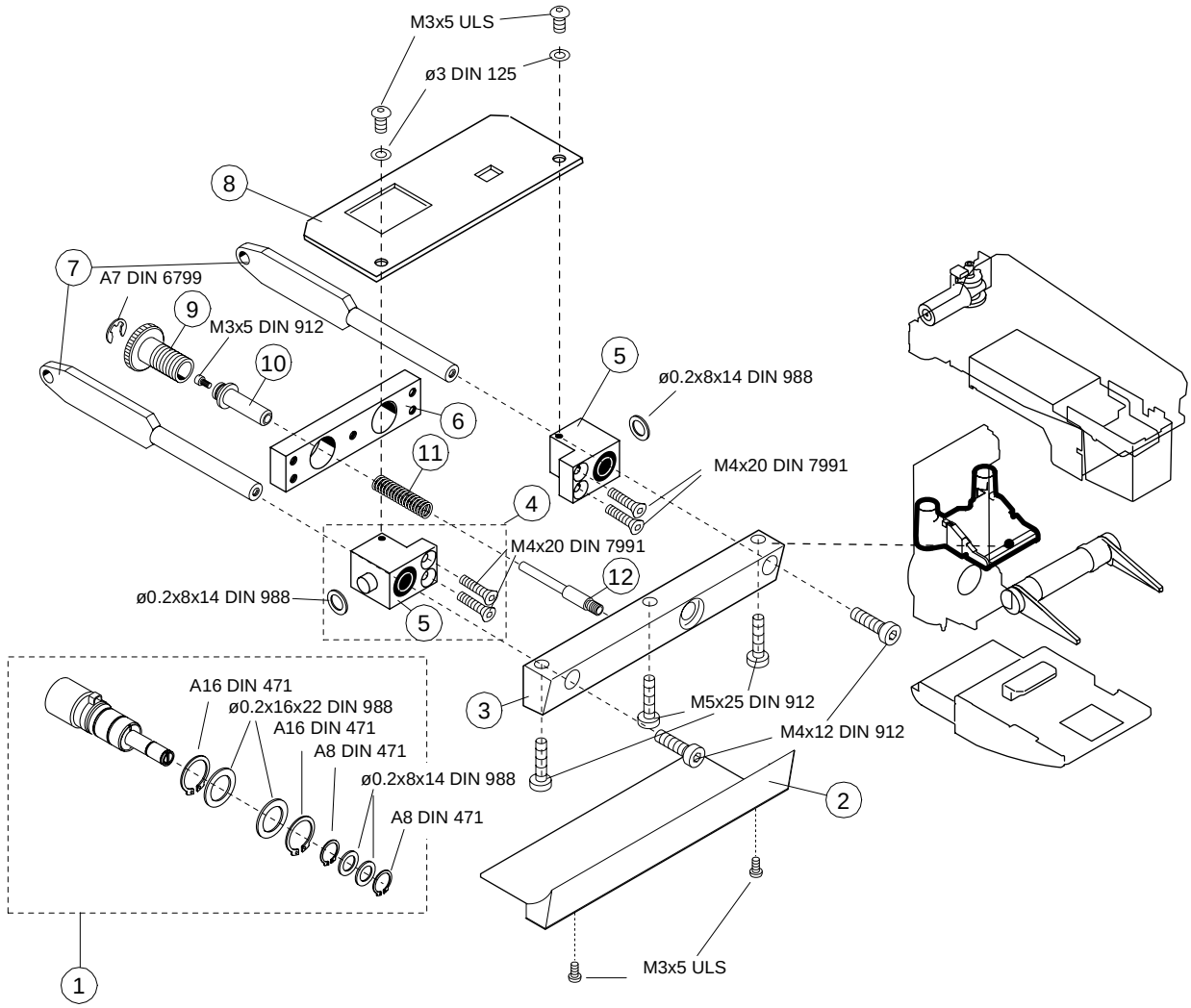
7.9 Tilting mechanism & force sensor



Ref	Part no.	Description
1	**7616103**	**Tilting lever assembly**
2	**7616207**	**Inner compression mech. assembly**
3	7516314	Hinge bracket
4	7516316	Hinge screw
5	7211200	Spring
6	7526101	Inner compression mechanism casting
7	7516313	Strain gauge bracket
8	7516317	Tilting lever axle
9	7516223	Tilting mech. bush
10	7516318	Spring
11	**7616105**	**Force sensor assembly (complete with strain gauge and FORCE SENSOR PCB)**

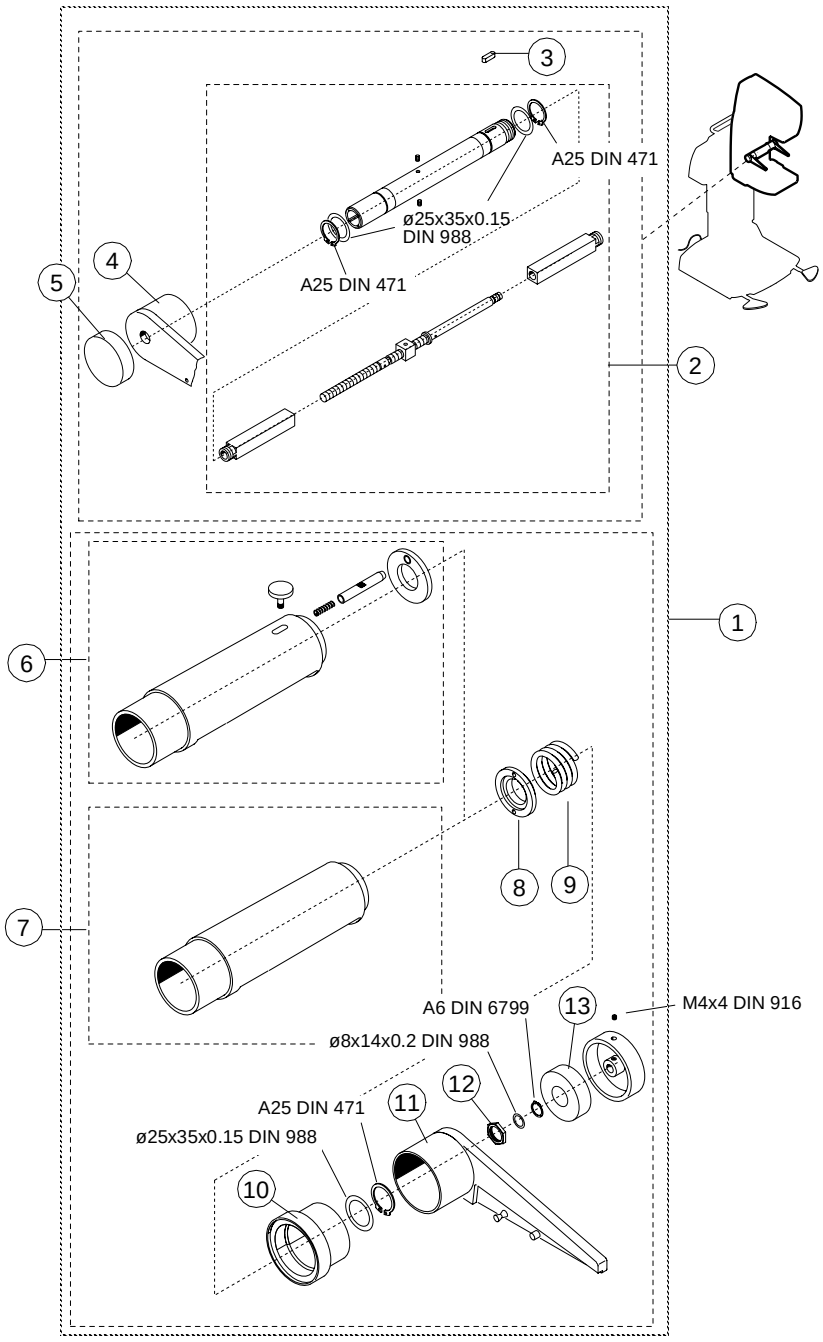
Ref	Part no.	Description
12	7211075	Plastic spacer

7.10 Tilting mechanism (continued)



Ref	Part no.	Description
1	**7616108**	**Shock absorber assembly (complete)**
2	7526556	Tilting mech. cover plate
3	7516549	Drum latch
4	**7616104**	**Linear bearing assembly**
5	7516361	Linear bearing
6	7516362	Bracket
7	7516229	Ttilting mechanism axle
8	7526364	Tilting mechanism cover
9	7516363	Twincomp force adjusting wheel
10	7516367	Twincomp force adjusting pin
11	7516365	Twincomp load spring
12	7516366	Twincomp force adjusting axle

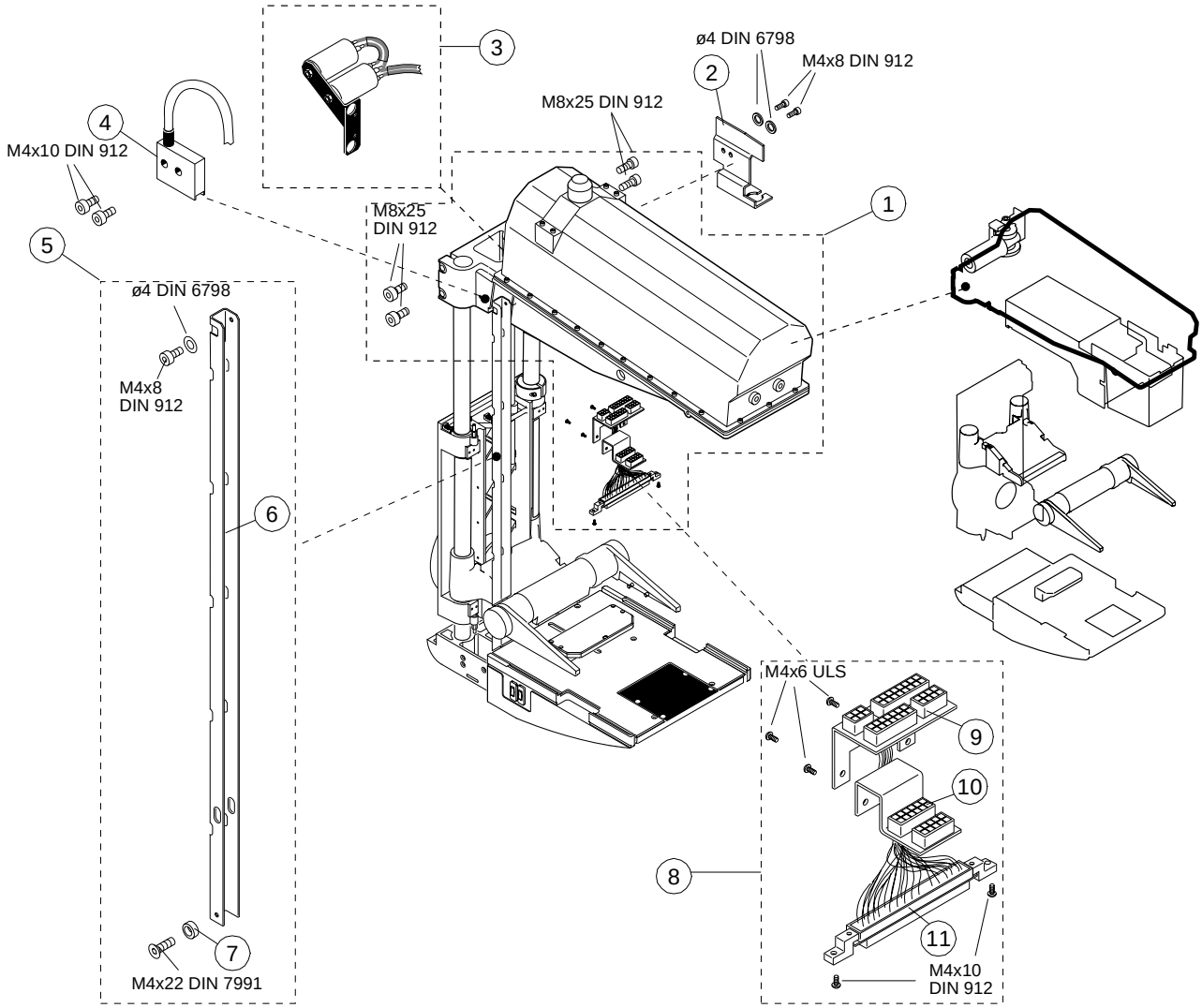
7.11 Upper compression paddle holding mechanism



Ref	Part no.	Description
1A	**7616120**	**Compression mechanism assembly**
1B	**7616127**	**Compression mechanism assembly, Stereotactic device**
2	**7616128**	**Main axle assembly, complete**
3	7256414	Wedge 4x14 mm
4	7616124	Left side paddle holder
5	7526532	Left side dummy wheel
6	**7616126**	**Drum assembly with release trigger Stereotactic device**
7	**7616125**	**Drum assembly**
8	7516545	Emergency release clutch
9	7516547	Clutch spring

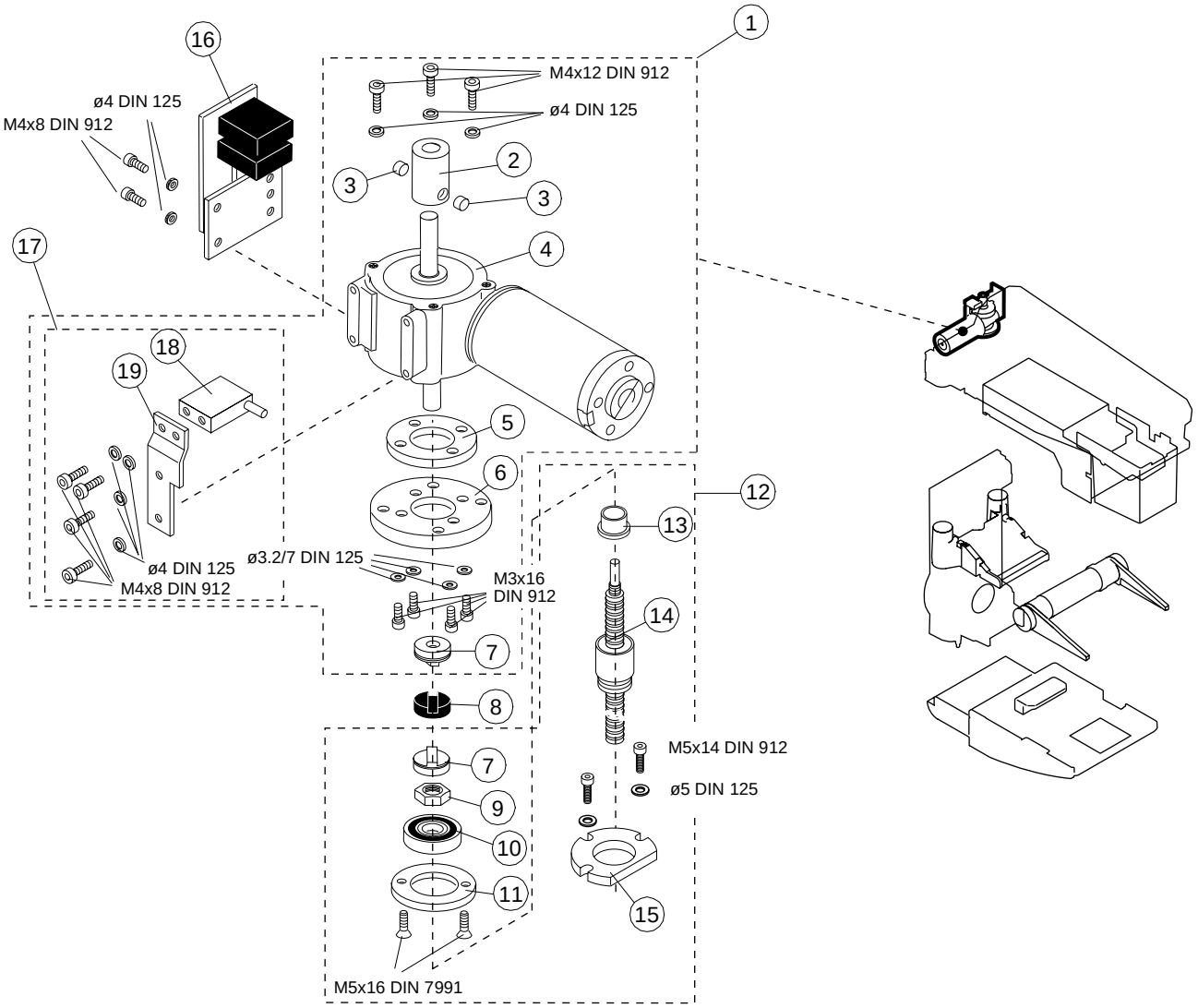
Ref	Part no.	Description
10	7526546	Emergency release moment adjustment ring
11	7616123	Right side paddle holder
12	7516538	Nut M15x1
13	7526531	Width adjustment wheel

7.12 C-arm brackets



Ref	Part no.	Description
1	**7615269**	**Tubehead (Toshiba)**
2	7515212	Cable holding bracket
3	**7615158**	**Anode motor capacitor assembly**
4	7827743	Mag down hall-sensor
5	**7615277**	**Cable guide assembly**
6	7515215	Cable guide
7	7515213	Spacer
8	**7615161**	**Power supply signal cables assembly (with holding brackets)**
9	7515235	Connector bracket 1
10	7515236	Connector bracket 2
11	7827724	Power supply signal cable

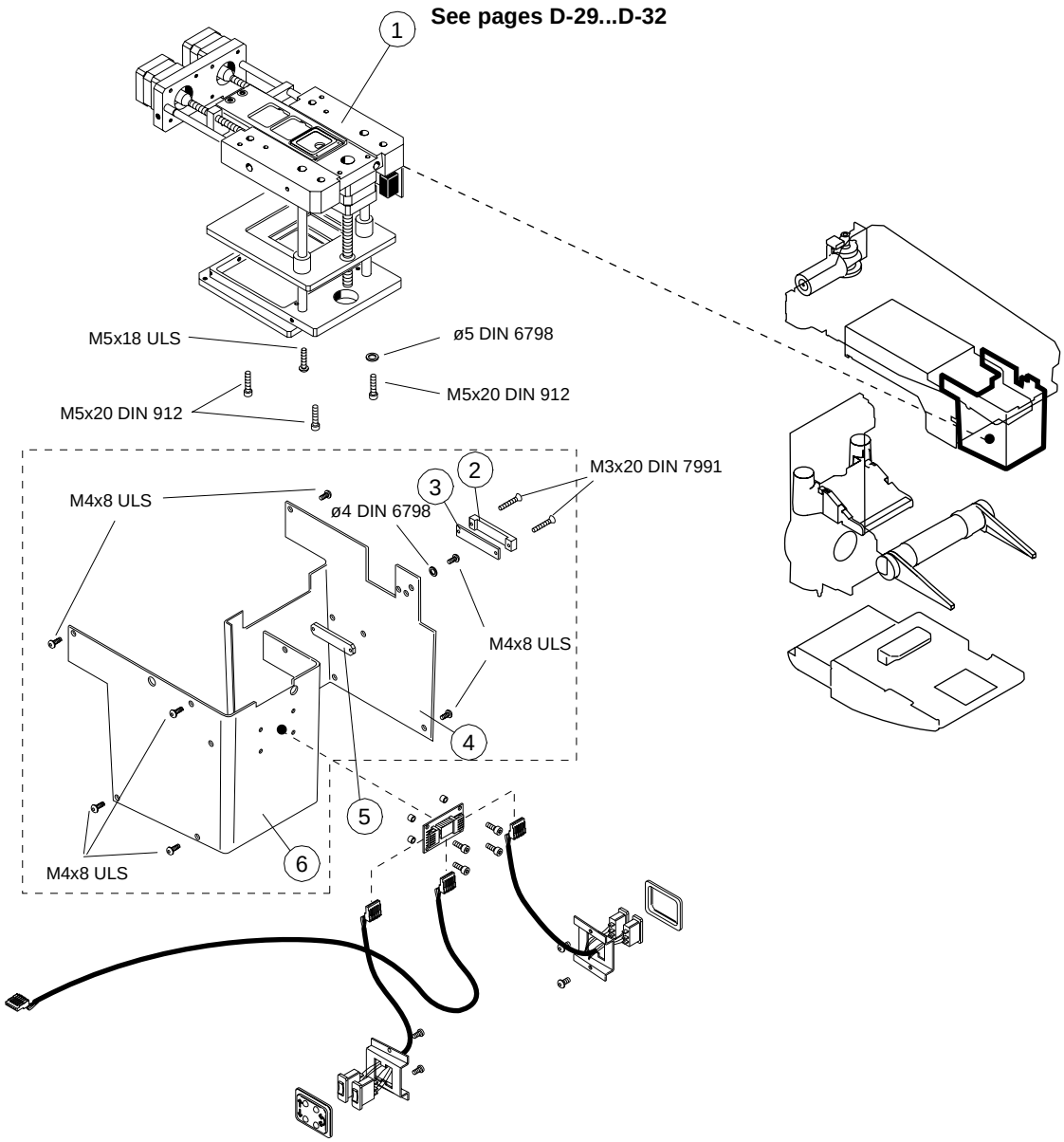
7.13 MAG/LOAD motor assembly, from ser. no IJ2001



Ref	Part no.	Description
1	**7615164**	**MAG/LOAD motor assembly**
2	7515232	Magnet holder sleeve
3	7841020	Magnet 3x4
4	7831002	MAG/LOAD DC-motor (with integral gearbox)
5	7515222	Motor fixing bracket (rubber)
6	7515221	Motor attachment bracket
7	7831017	Clutch fork
8	7831018	Clutch disk (plastic)
9	7259010	Nut 10x1.5 mm DIN 936
10	7211015	Ball bearing SKF6001-2RS1
11	7515214	Bearing holding bracket
12	**7615168**	**New floating Mag/Load worm screw assembly, complete.**

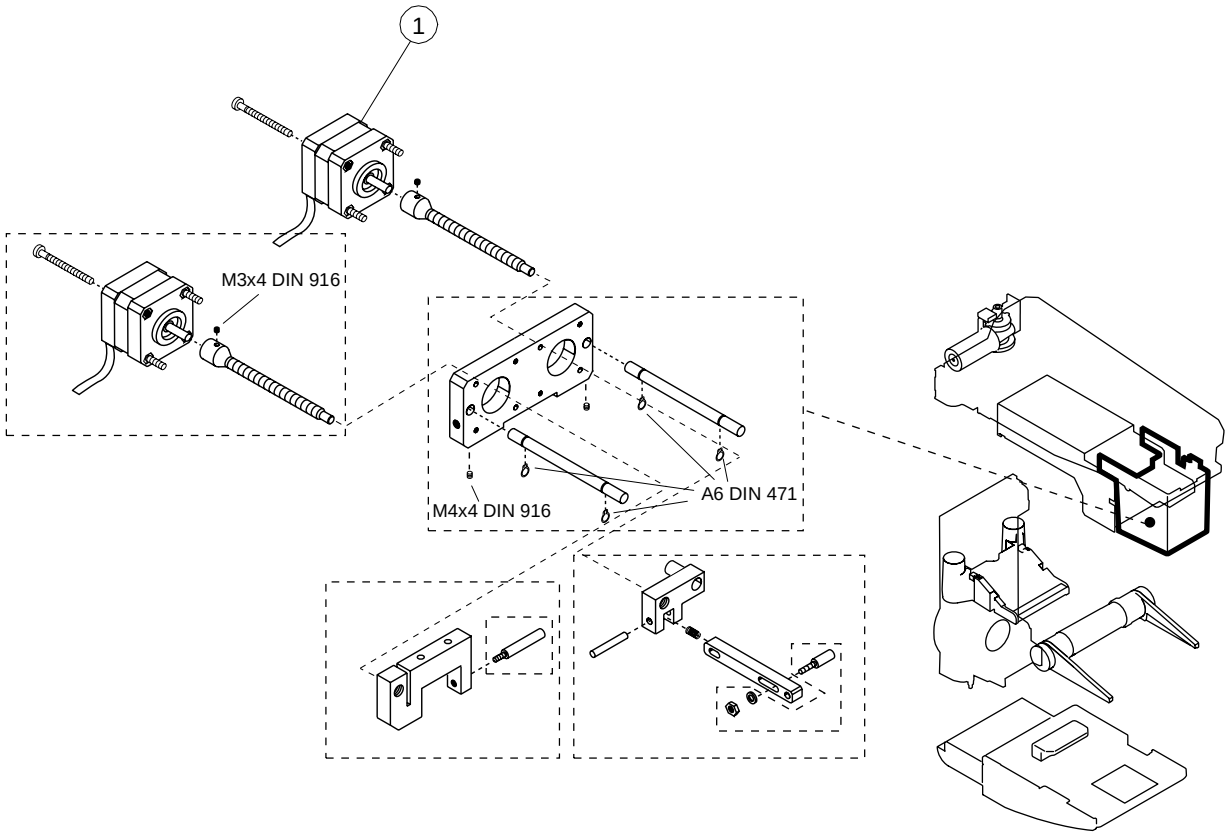
Ref	Part no.	Description
13	7514421	Mag bearing bush
14	7614413	New worm screw 12x4R
15	7514422	Mag nut collar
16	**7810020**	**MAG CONTROL PCB**
17	**7615166**	**Mag/Load motor rotation sensor assembly**
18	7827748	Mag pulse hall-sensor
19	7515233	Hall sensor bracket

7.14 Collimator assembly



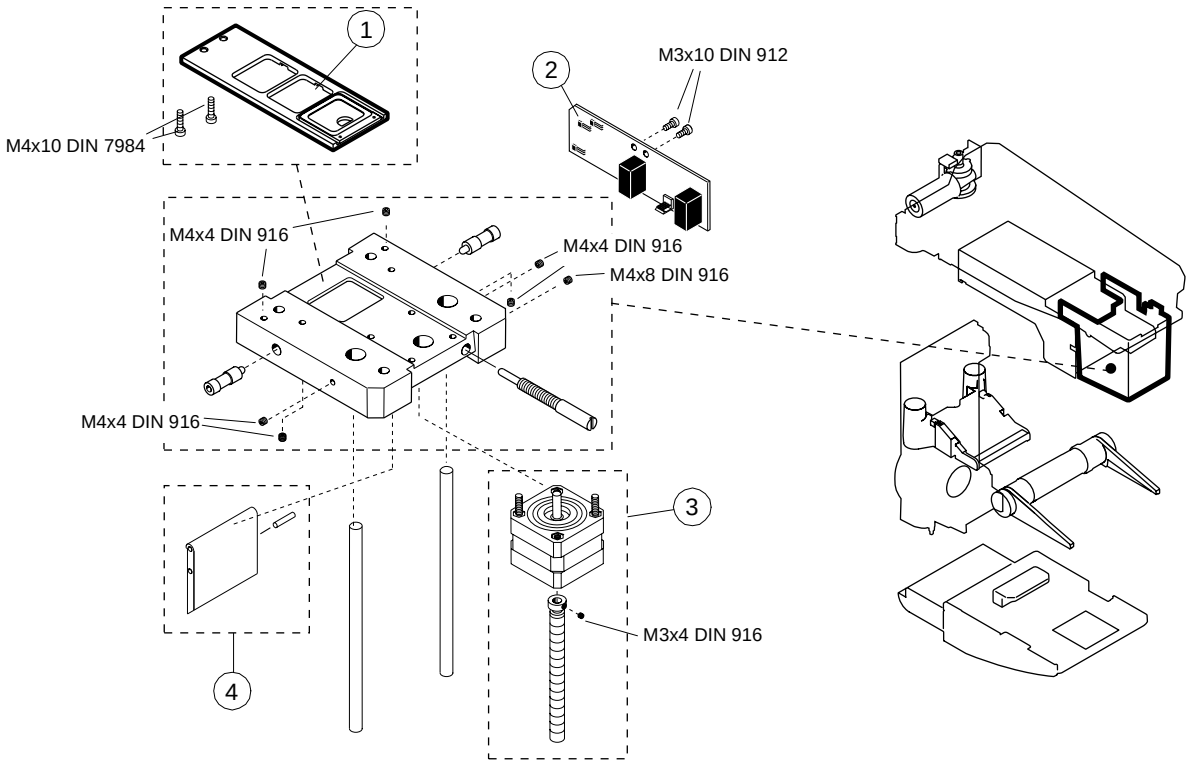
Ref	Part no.	Description
1	**7615240**	**Collimator assembly, complete (with-out collimator cover)**
2	7515391	Power connector holder bracket
3	7515392	Power connector spacer
4	7515352	Collimator side cover
5	7515394	Power connector screw holder bracket
6	7515353	Collimator front cover

7.15 Mirror & filter motors



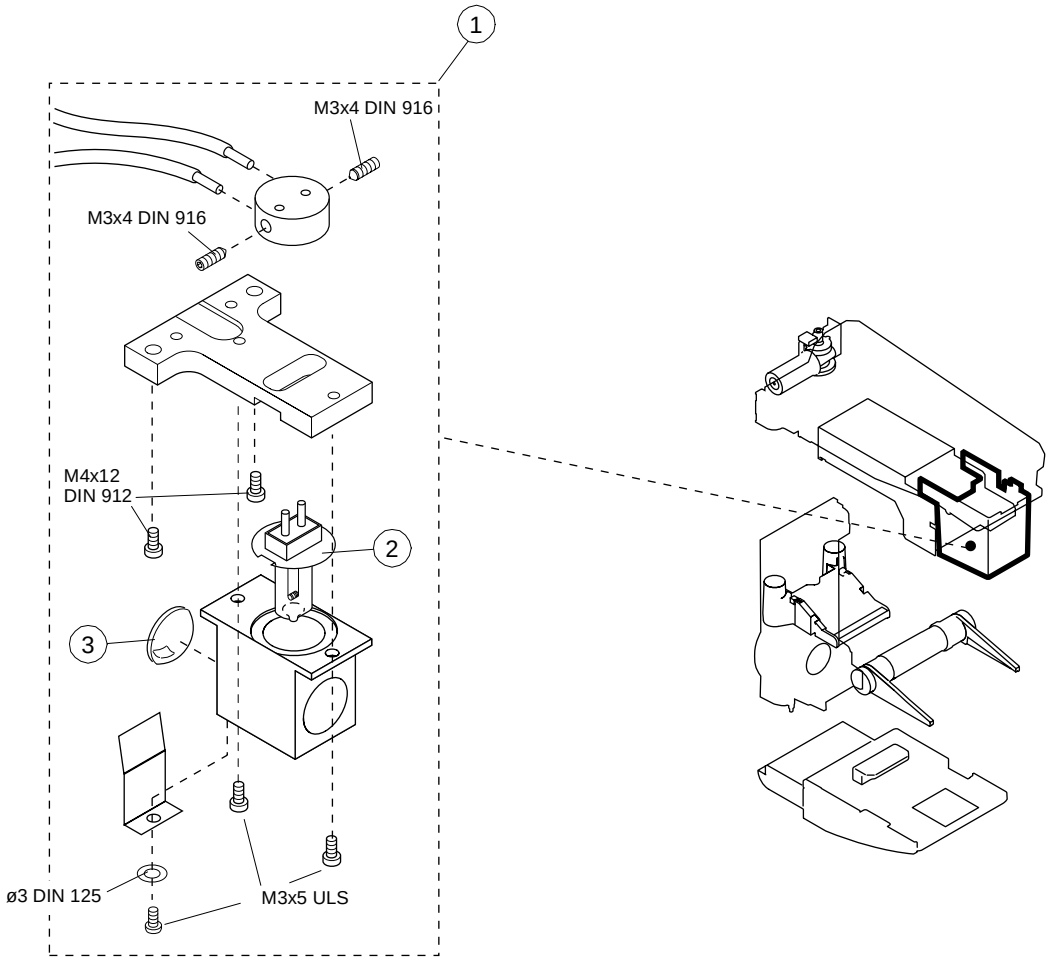
Ref	Part no.	Description
1	7831001	Stepper motor

7.16 Filter & mirror & collimator motor



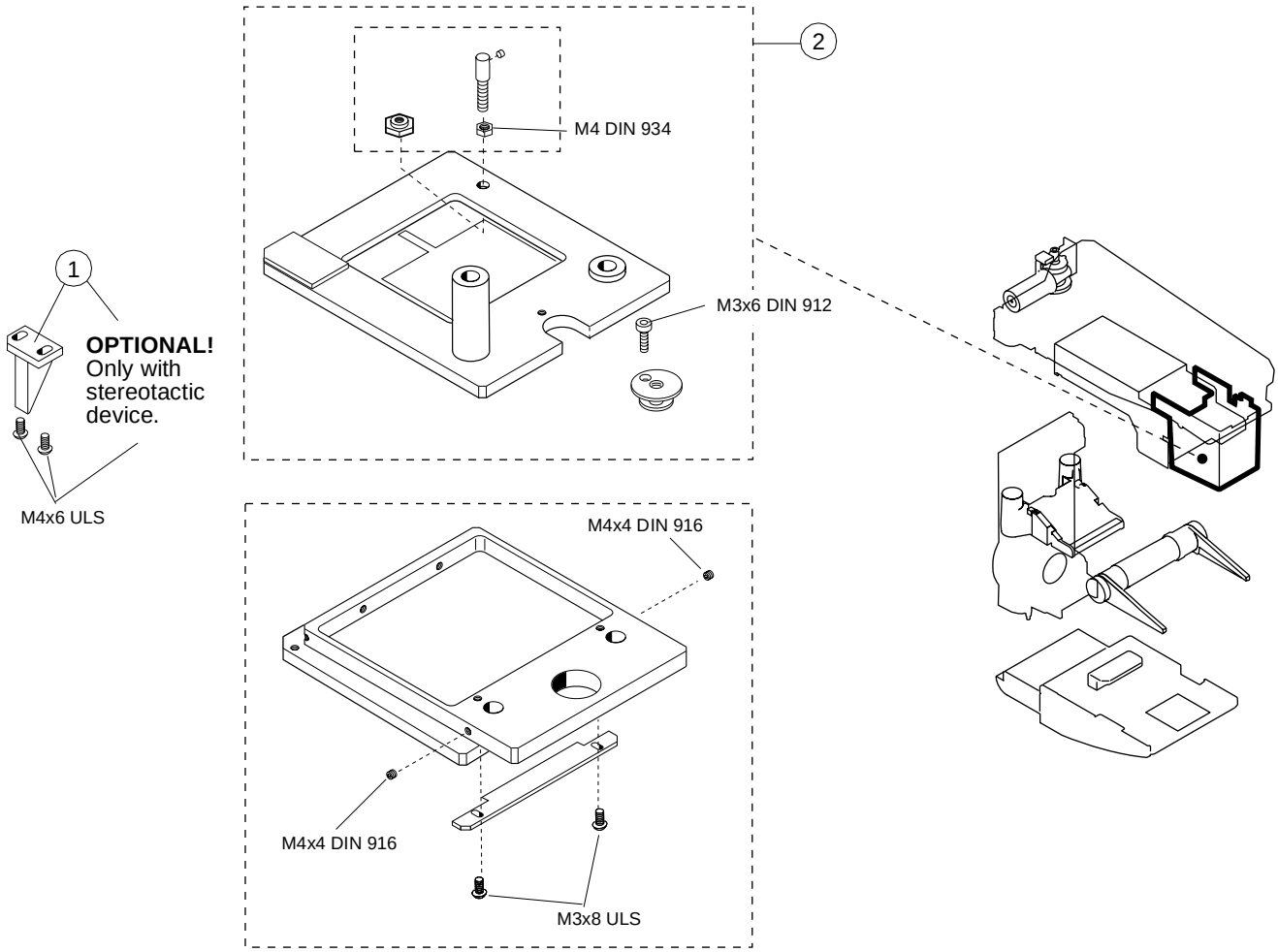
Ref	Part no.	Description
1A	**7615156**	**Filter ladder assembly**
1B	**7615157**	**Filter ladder Rh assembly**
2	7810011	COLLIMATOR PCB
3	**7615143**	**Stepper motor assembly**
4	**7615149**	**Mirror assembly**

7.17 Lamp assembly



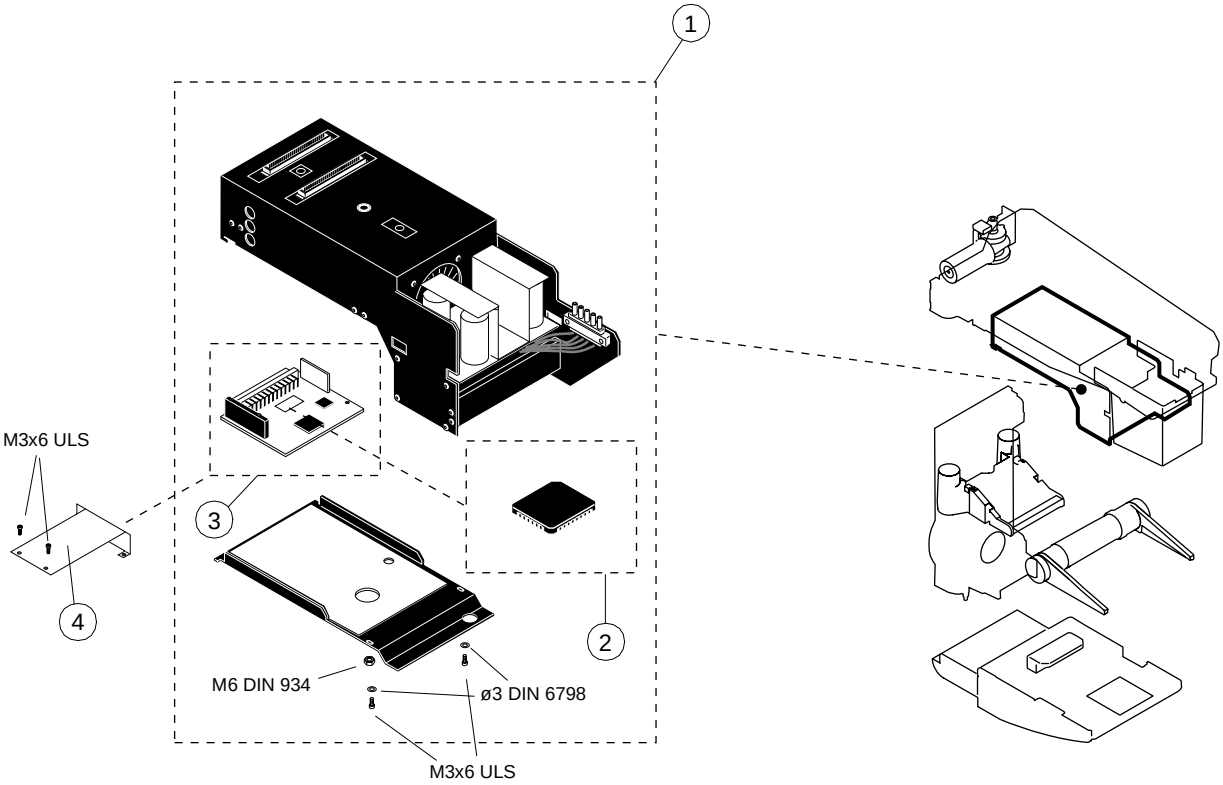
Ref	Part no.	Description
1	**7615254**	**Lamp assembly**
2	7841204	Bulb 12V/ 30W
3	7842104	Mirror

7.18 Beam collimator



Ref	Part no.	Description
1	7514851	Collimator wedge
2	**7615251**	**Collimator assembly**

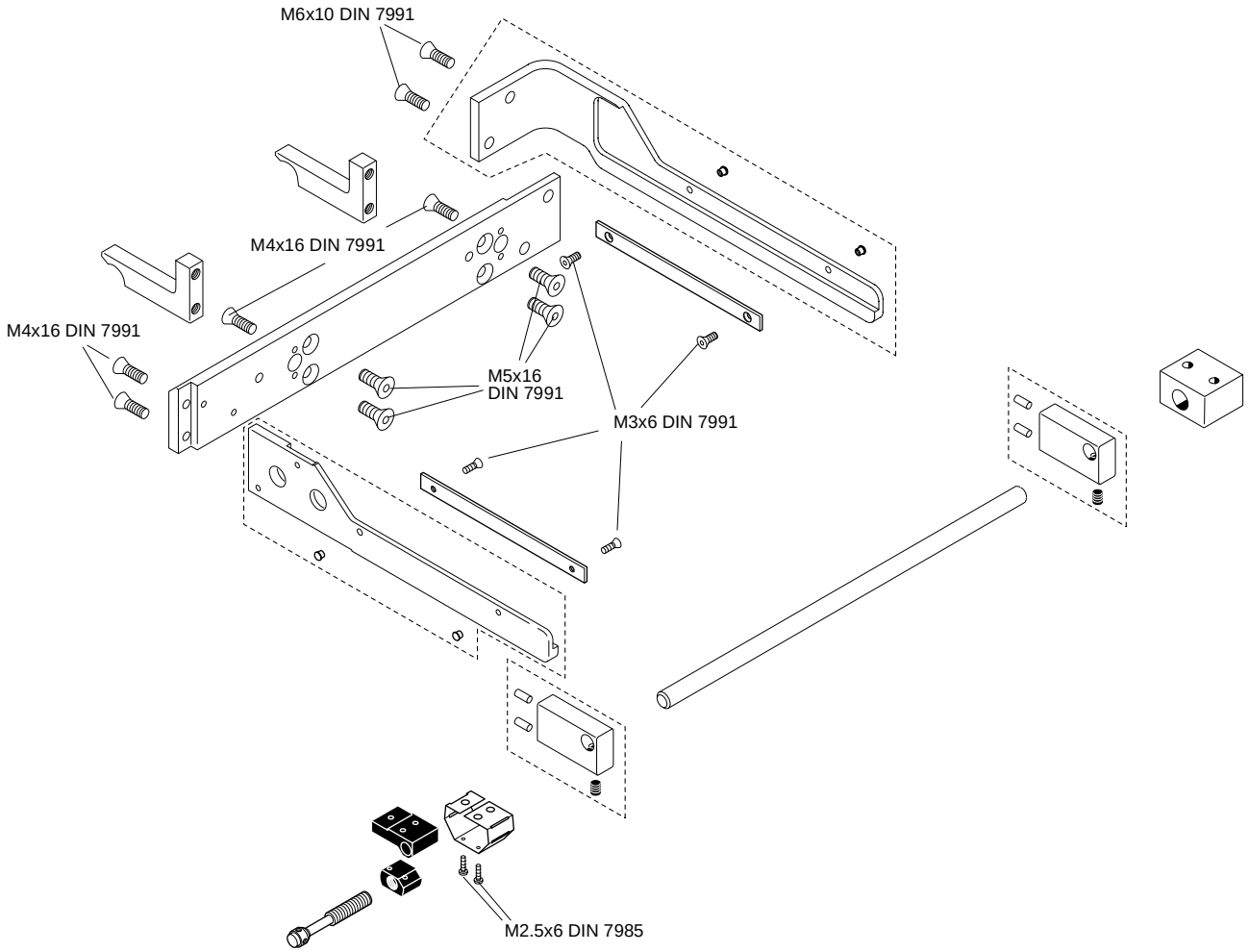
7.19 Power supply



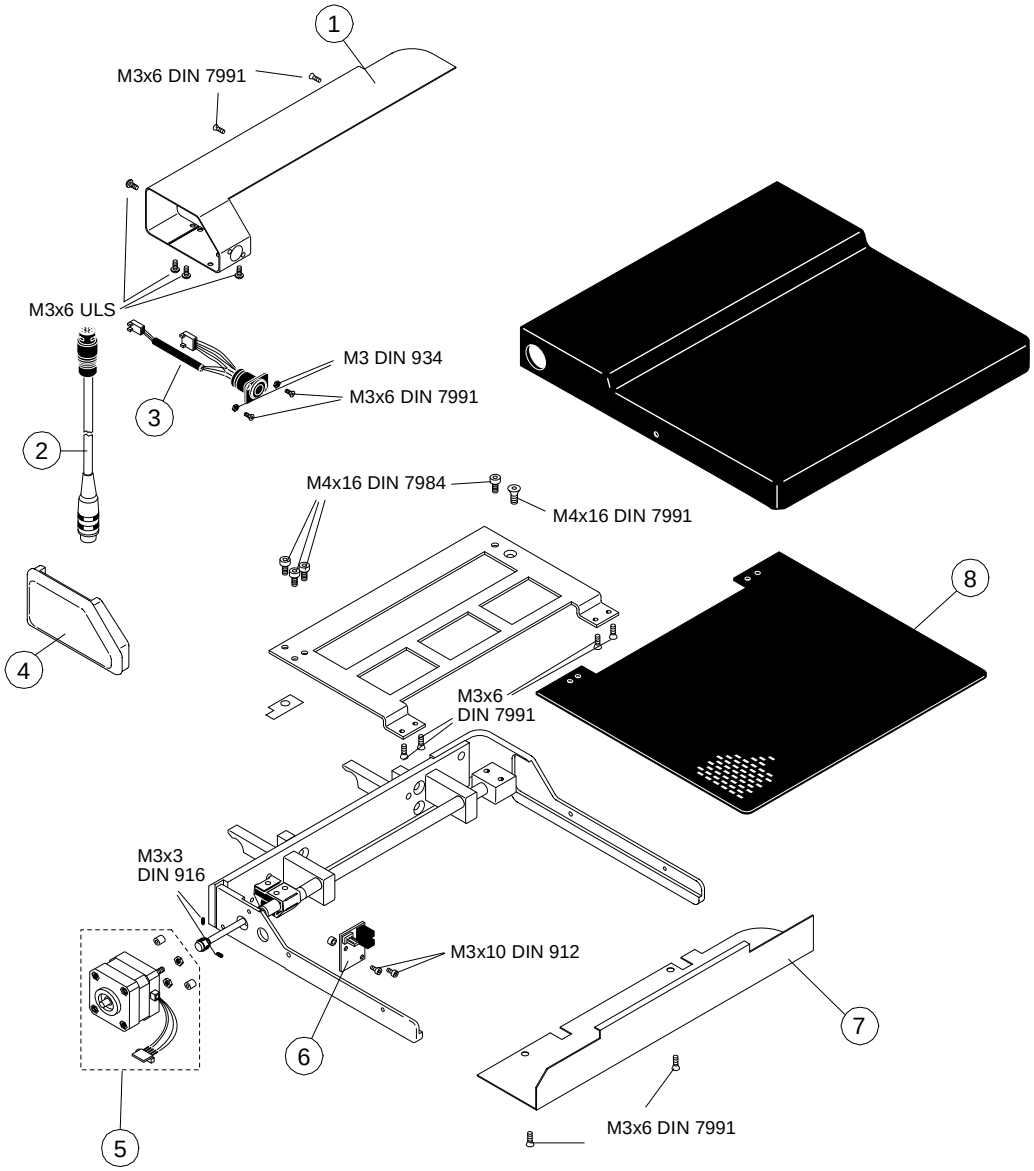
Ref	Part no.	Description
1	**7615176**	**Power Supply assembly (complete with TUBE CPU PCB)**
2	7841092	Tube software chip PLCC
3	7810014	Tube CPU PCB
4	7515473	Protection cover for TUBE CPU (only for transportation and handing of the PCB)

8 COMPRESSION PADDLES & SHIELDS

8.1 Bucky 18x24 (small), Daylight, code 7000211

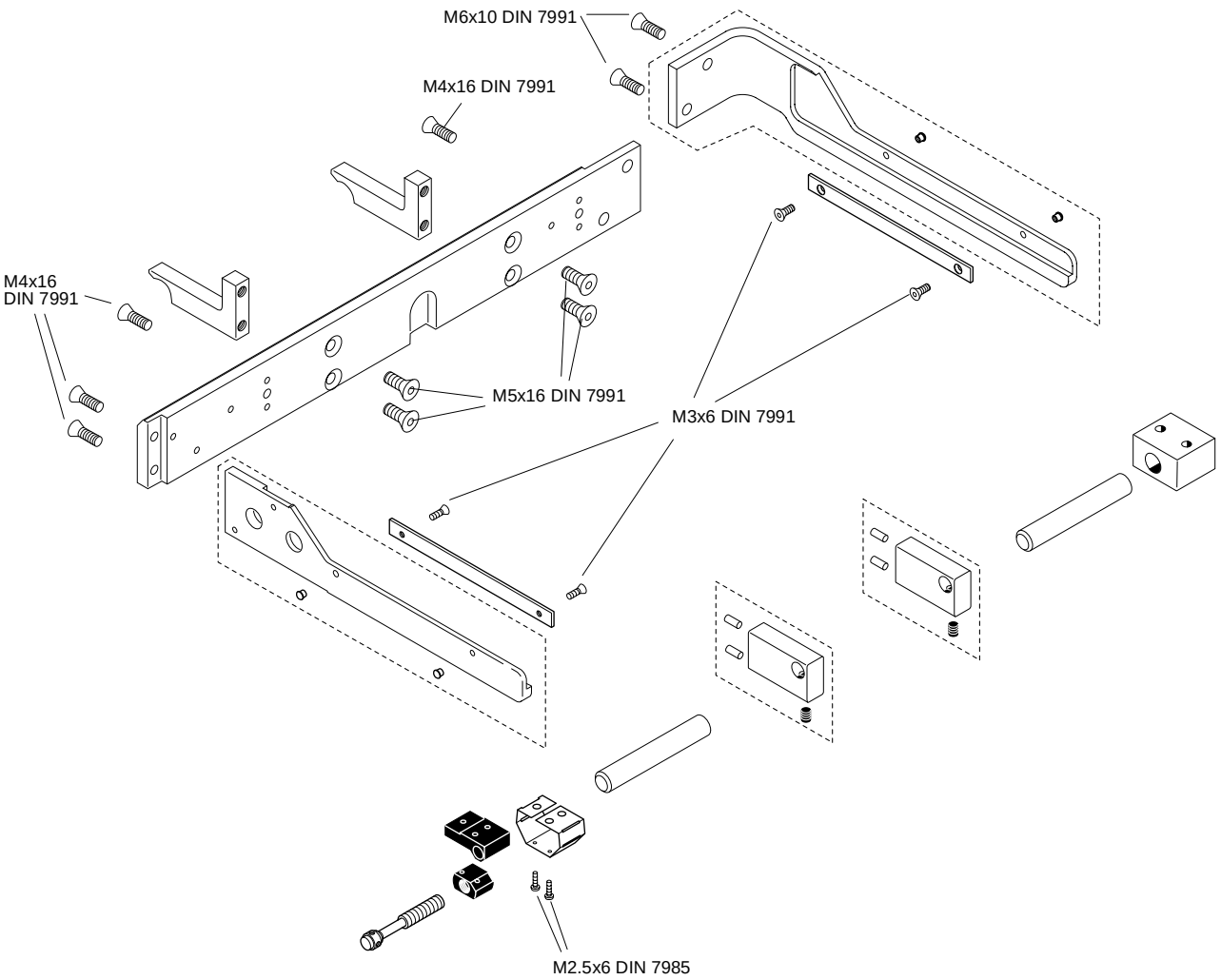


8.1.1 Bucky 18x24 (small), covers

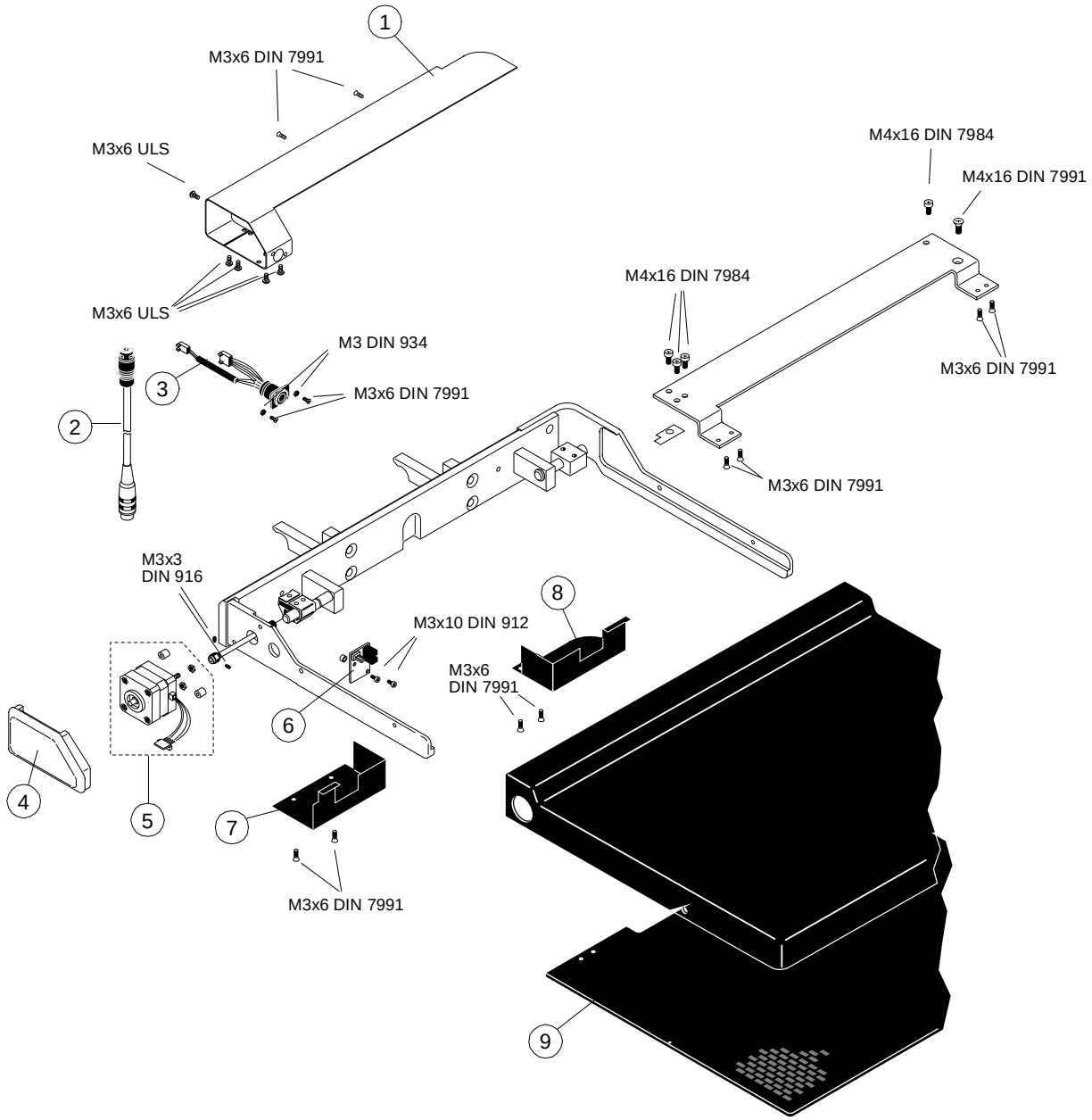


Ref	Part no.	Description
1	7524774	Upper cover (Daylight)
2	7827737	Bucky grid control cable, out 1
3	7827758	Bucky grid control cable out 2
4	7524719	End cap
5	7514745	Bucky motor
6	7810025	Bucky ref. PCB
7	7524775	Lower cover (Daylight)
8	7514711	Grid 18x24cm

8.2 Bucky 24x30 (large), Daylight, code 7000221

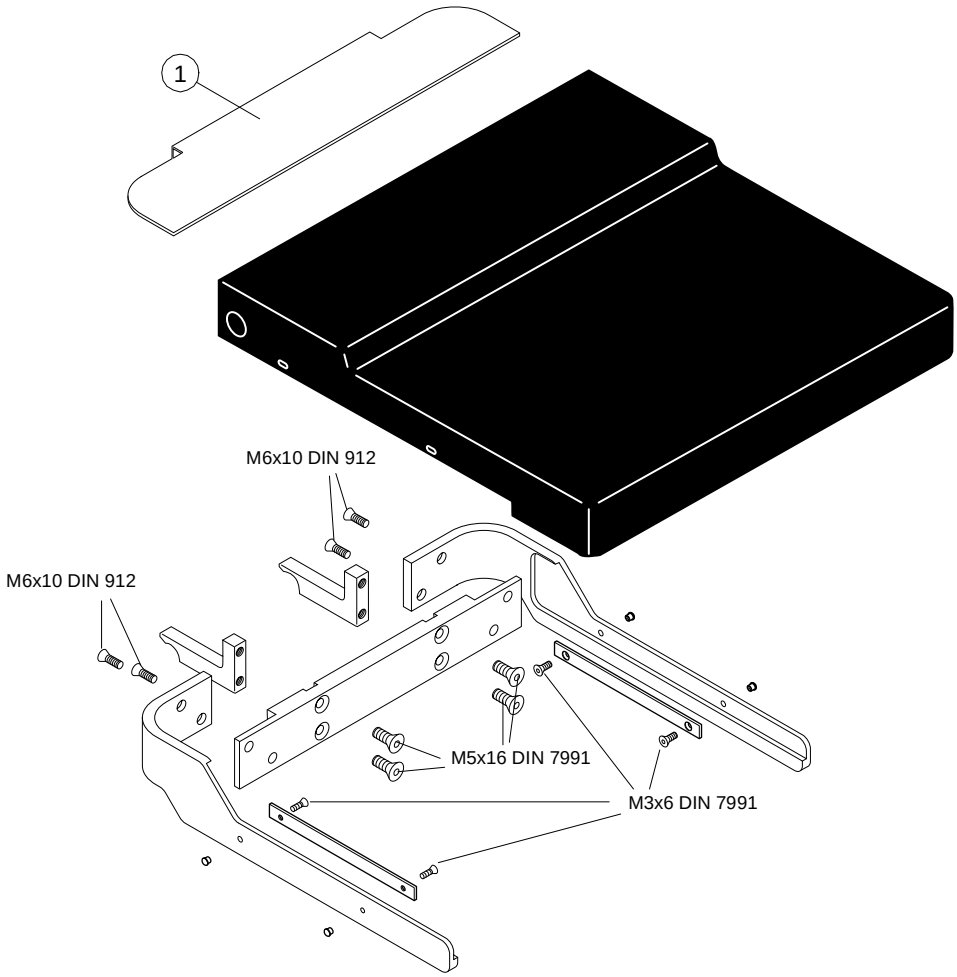


8.2.1 Bucky 24x30 (large), covers



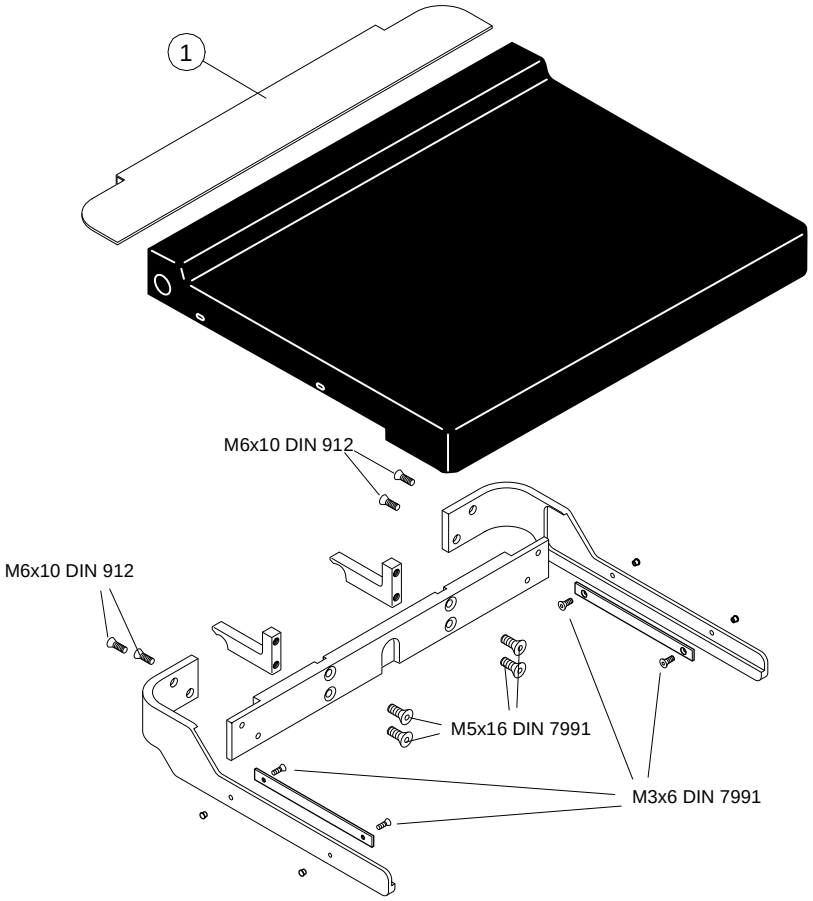
Ref	Part no.	Description
1	7524784	Upper cover (Daylight)
2	7827737	Bucky grid control cable, out 1
3	7827764	Bucky grid control cable out 2
4	7524719	End cap
5	7514745	Bucky motor
6	7810025	Bucky ref. PCB
7	7514786	Left lower cover (Daylight)
8	7514785	Right lower cover (Daylight)
9	7514712	Grid 24x30cm

8.3 Lower compression paddle 18x24, Daylight, code 7000011



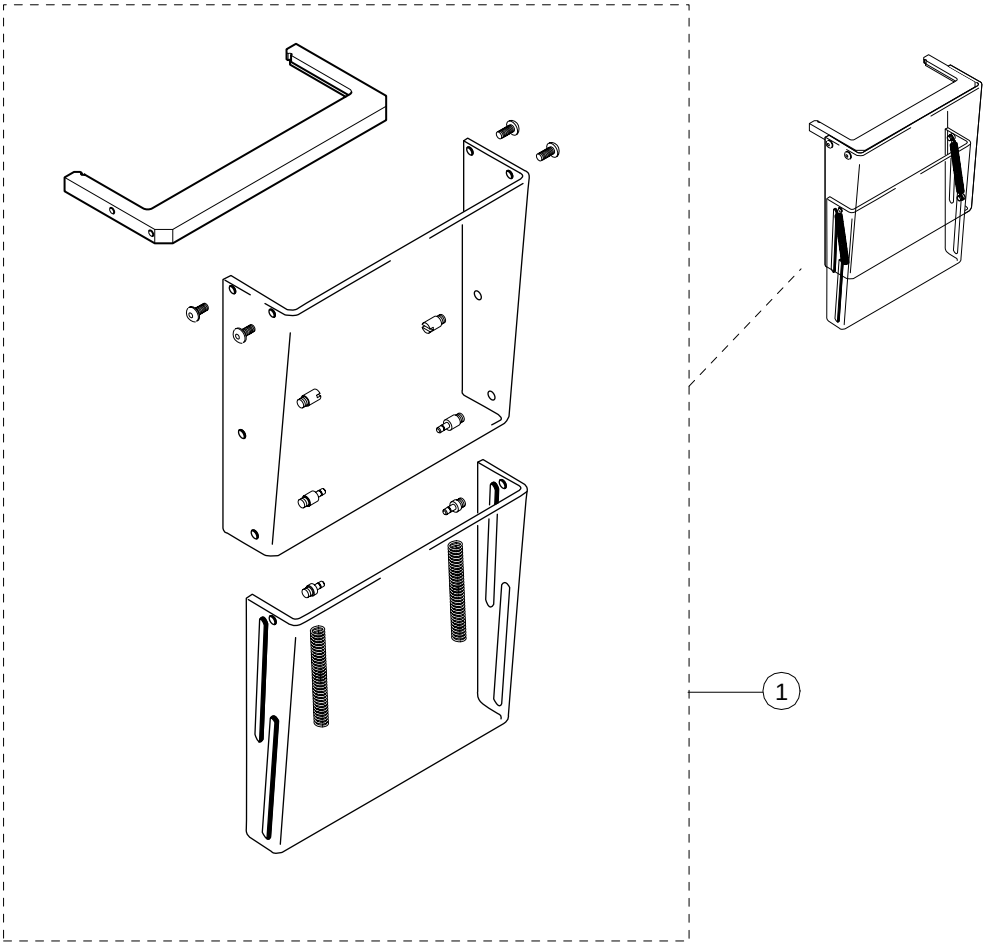
Ref	Part no.	Description
1	7524339	Upper cover 18x24 (Daylight)

8.4 Lower compression paddle 24x30, Daylight, code 7000021



Ref	Part no.	Description
1	7524340	Upper cover 24x30 (Daylight)

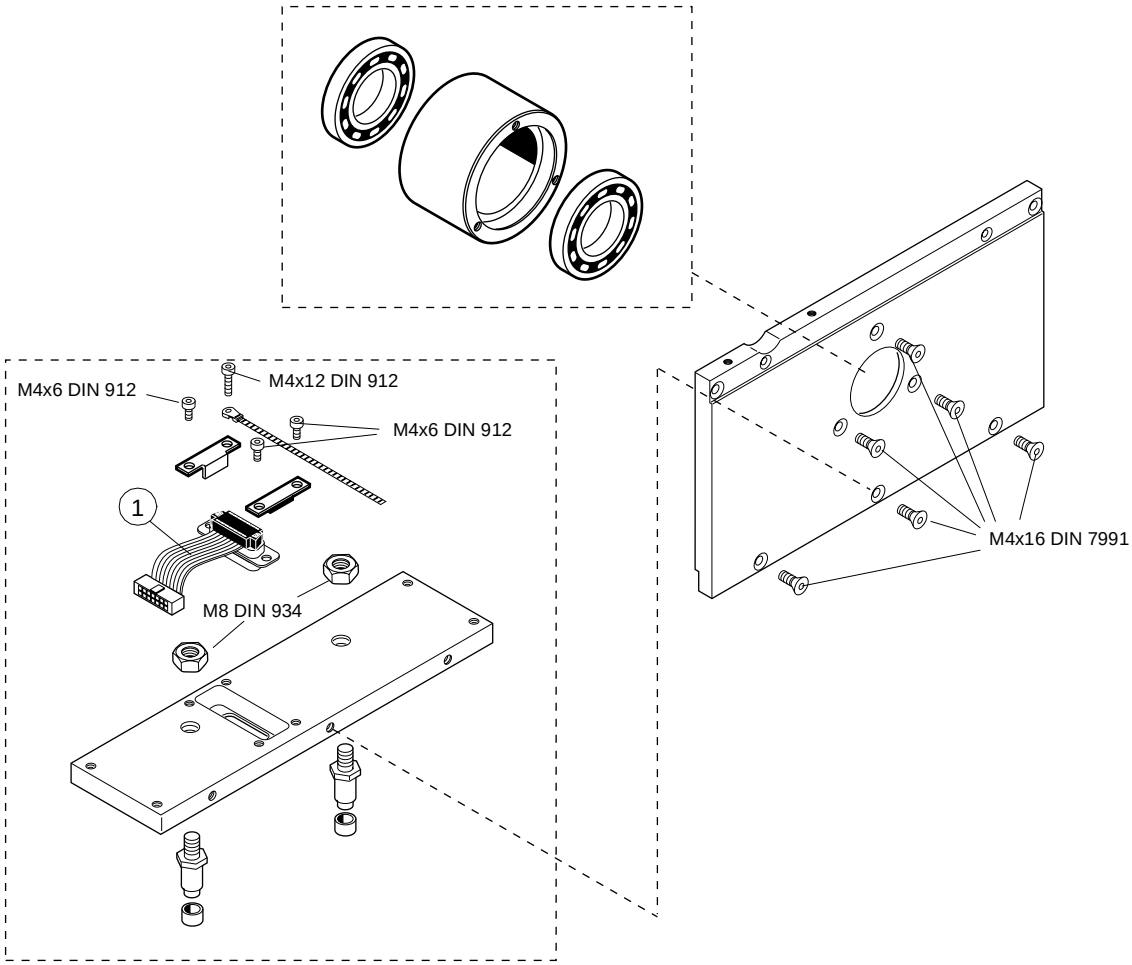
8.5 Chin guard



Ref	Part no.	Description
1	7615270	Chin guard

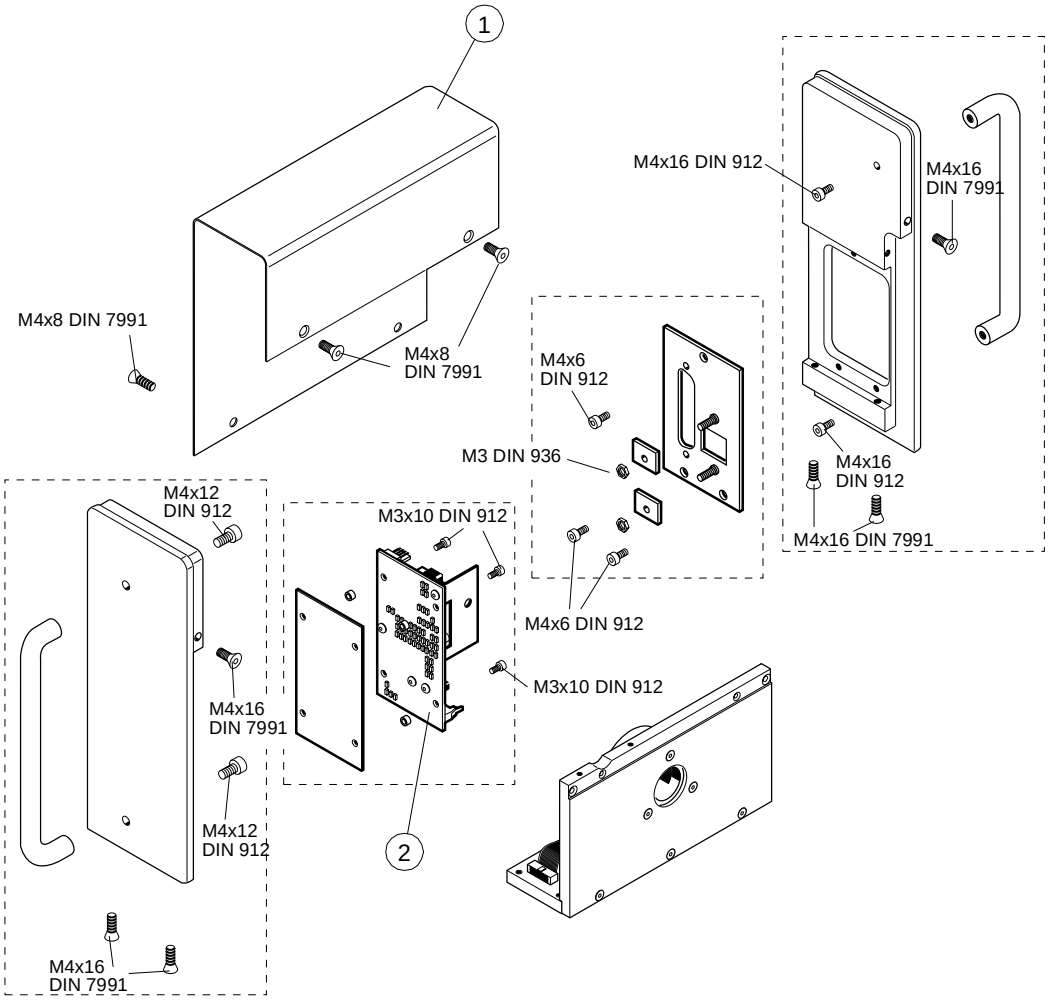
9 STEREOTACTIC DEVICE

9.1 Fixing plate assy



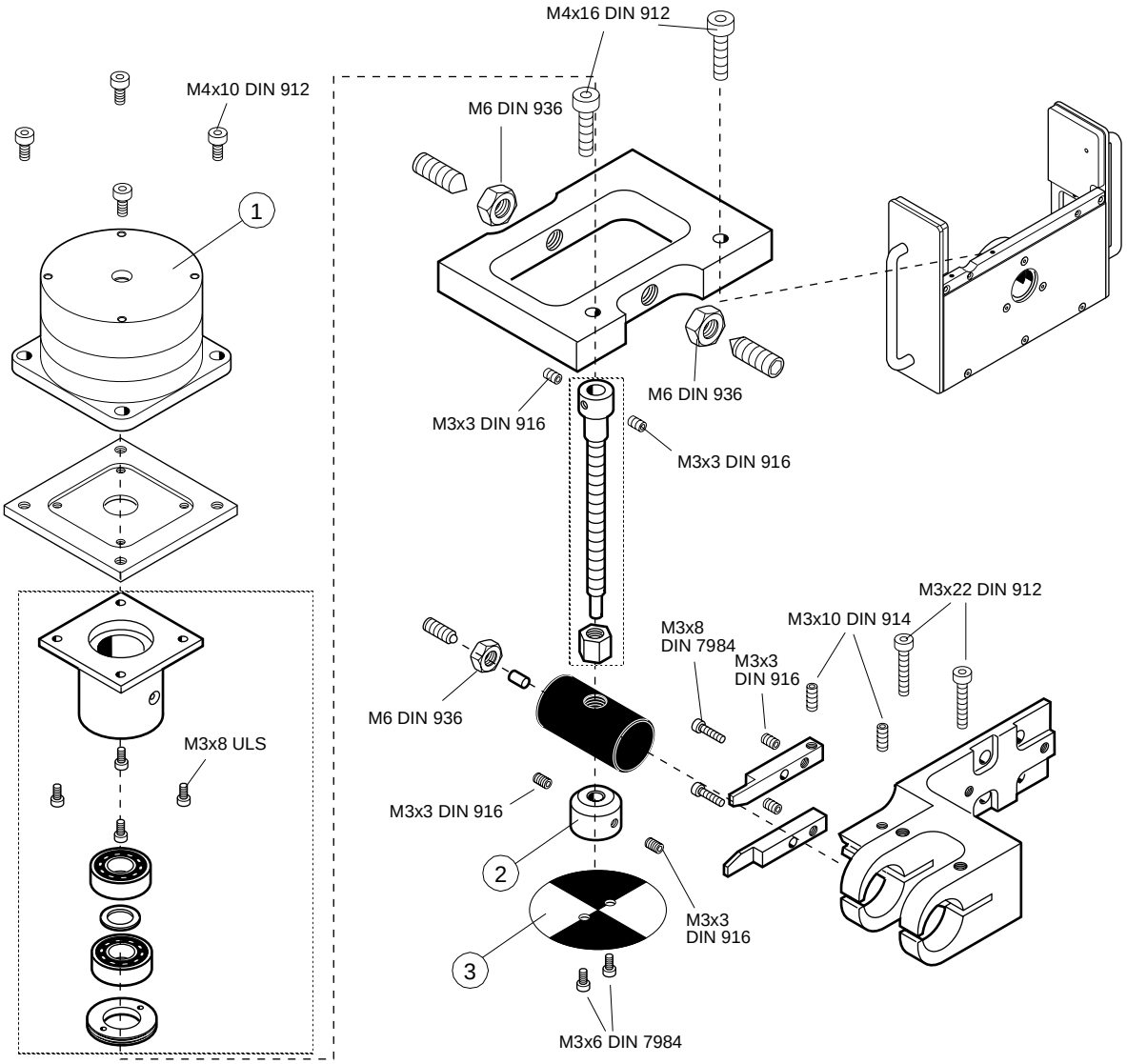
Ref	Part no.	Description
1	7827735	Stereo control cable

9.2 Frame assy



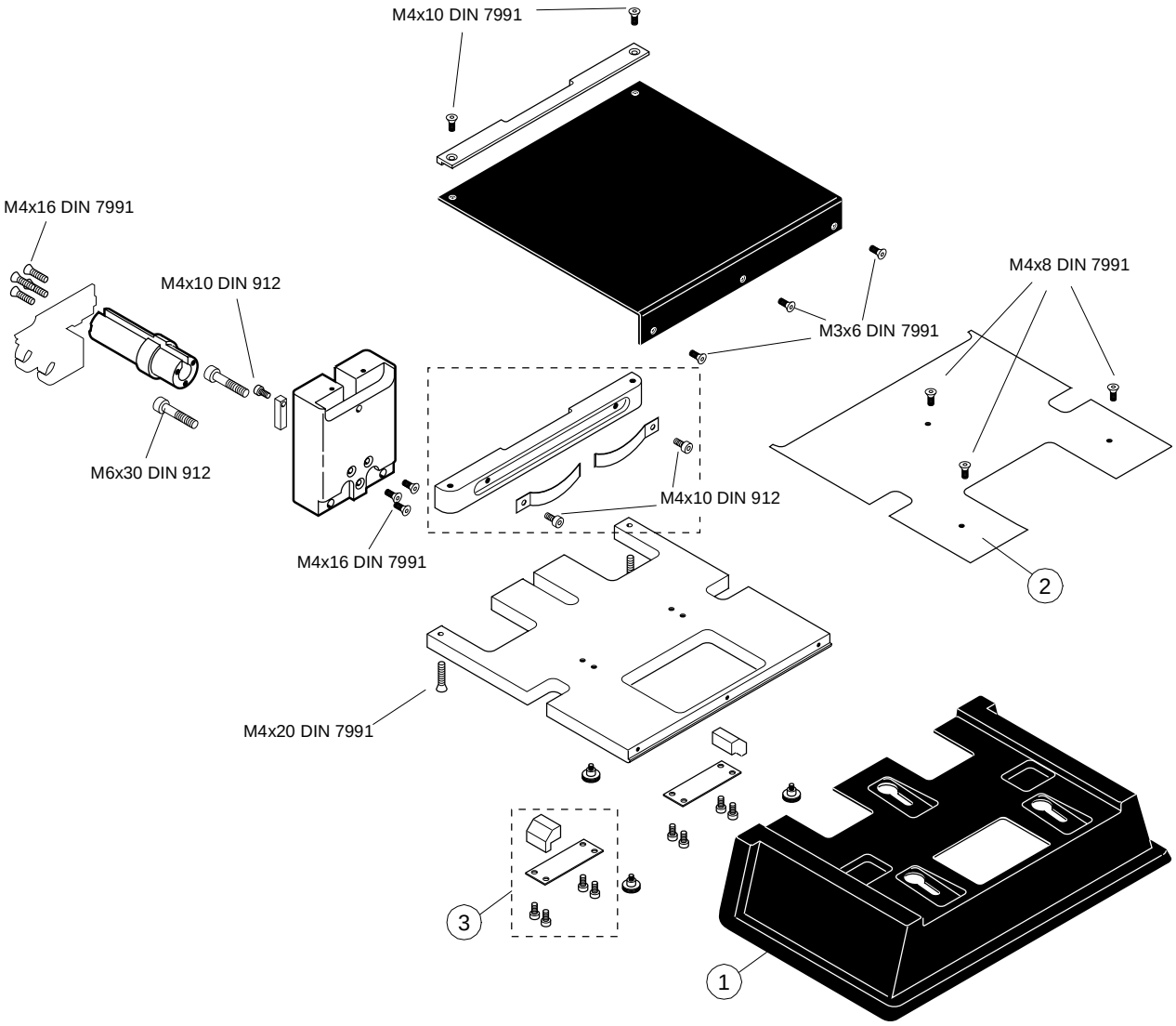
Ref	Part no.	Description
1	7514811	Cover
2	7810026	Stereo control PCB

9.3 Compensator motor assy



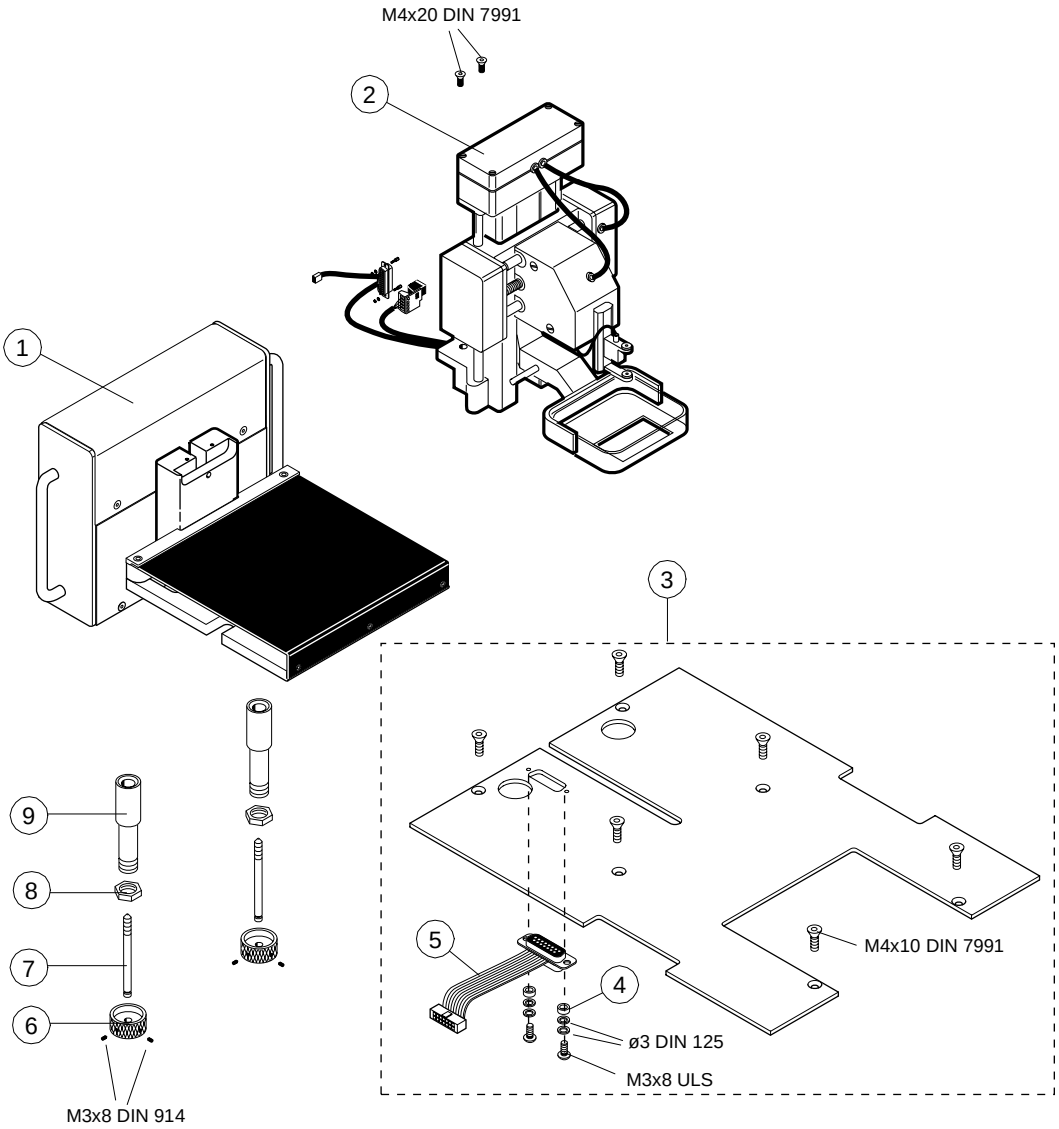
Ref	Part no.	Description
1	7831004	Stepper motor
2	7514819	Pulse plate holder
3	7514835	Pulse plate

9.4 Adapter assy



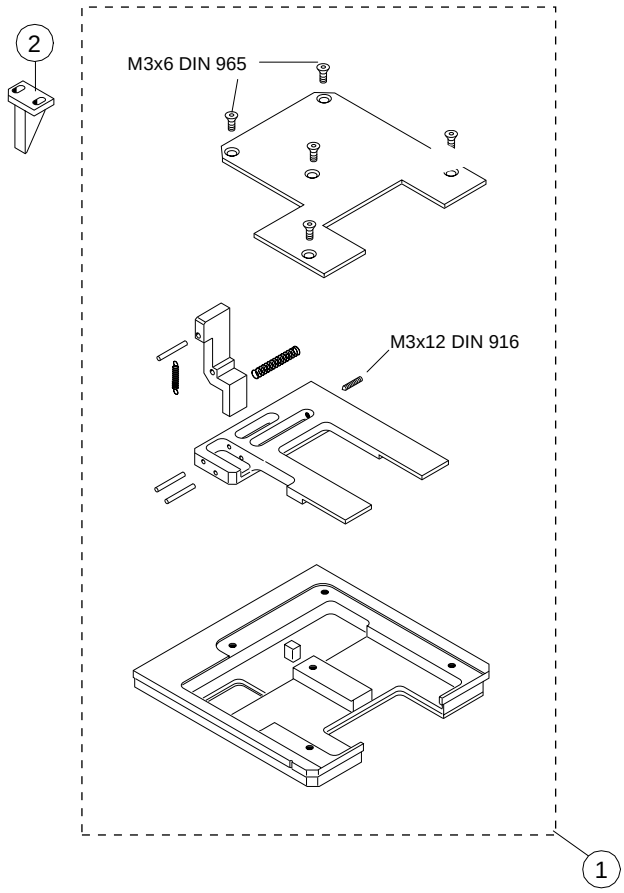
Ref	Part no.	Description
1	7514861	Stereotactic security cover
2	7514869	Daylight extension plate
3	**7614157**	**Side spring assembly**

9.5 Stereotactics complete



Ref	Part no.	Description
1	**7614163**	**Planmed cytoguide adaptation**
2	**7614164**	**Cytoguide device**
3	**7614168**	**Cassette table top cover Stereotactics assembly, Daylight**
4	7514753	Bush
5	7827735	Stereotactic control cable
6	7514822	Tightening wheel
7	7514823	Tightening screw
8	7514854	Guide nut
9	7514831	Guide bushing

9.6 Stereotactics beam limiter assy



Ref	Part no.	Description
1	**7614158**	**Stereo beam limiter assy**
2	7514851	Collimator wedge

Chapter

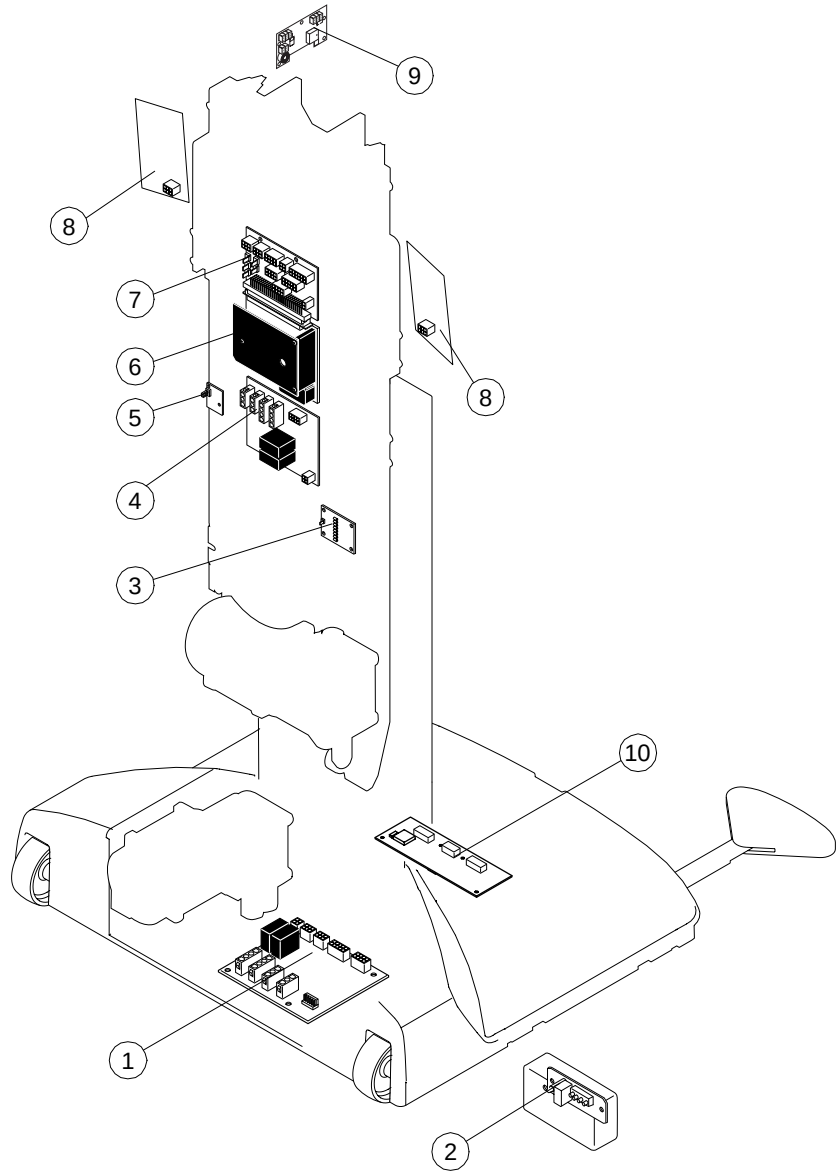
E

PCB´S & CABLES & SENSORS

1 GENERAL

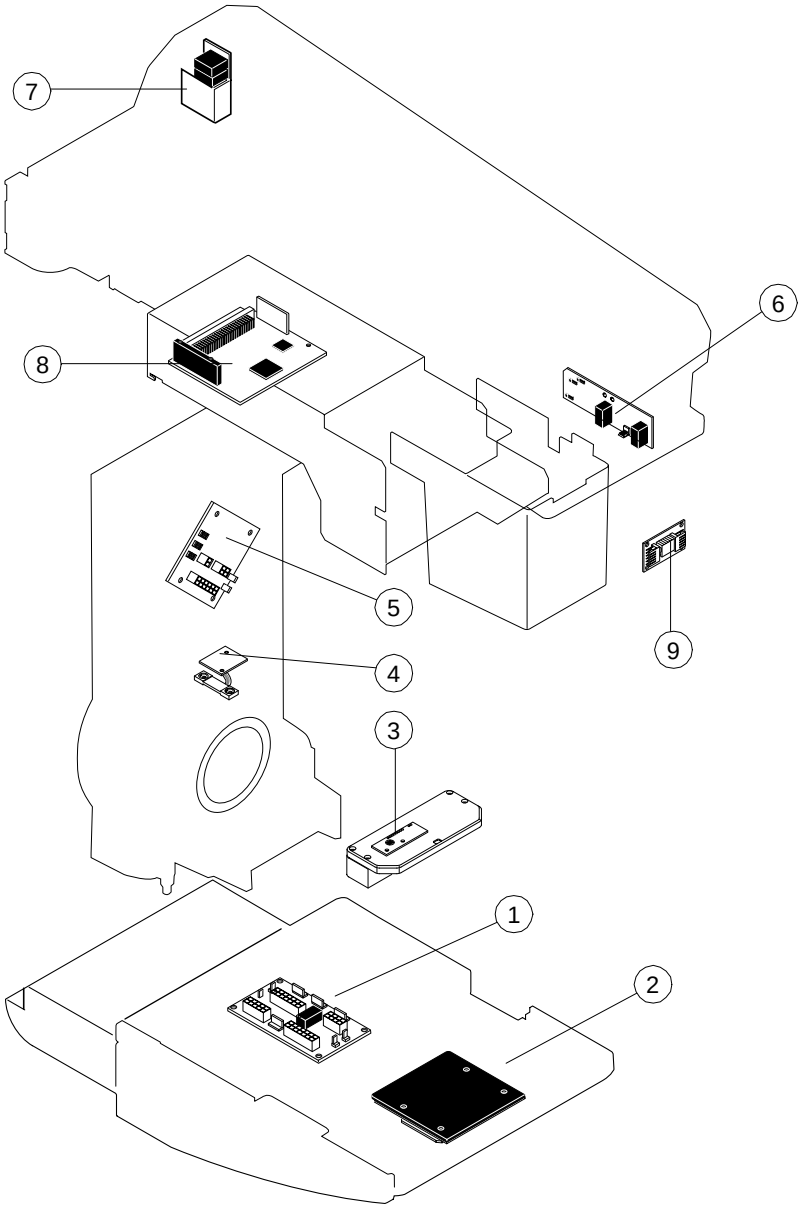
2 PRINTED CIRCUIT BOARDS

2.1 Base & column



Ref	Part no.	Description
1	7810001	Base circuit board
2	7810040	Remote control circuit board
3	7810007	Rotation reference circuit board
4	7810005	SYNC PCB board
5	7810029	Lift ref. PCB
6	7810004	Rear processor circuit board
7	7810003	Rear collector circuit board
8	7810032	Display circuit board
9	7810028	Sophie remote display
10	7810033	Base display PCB

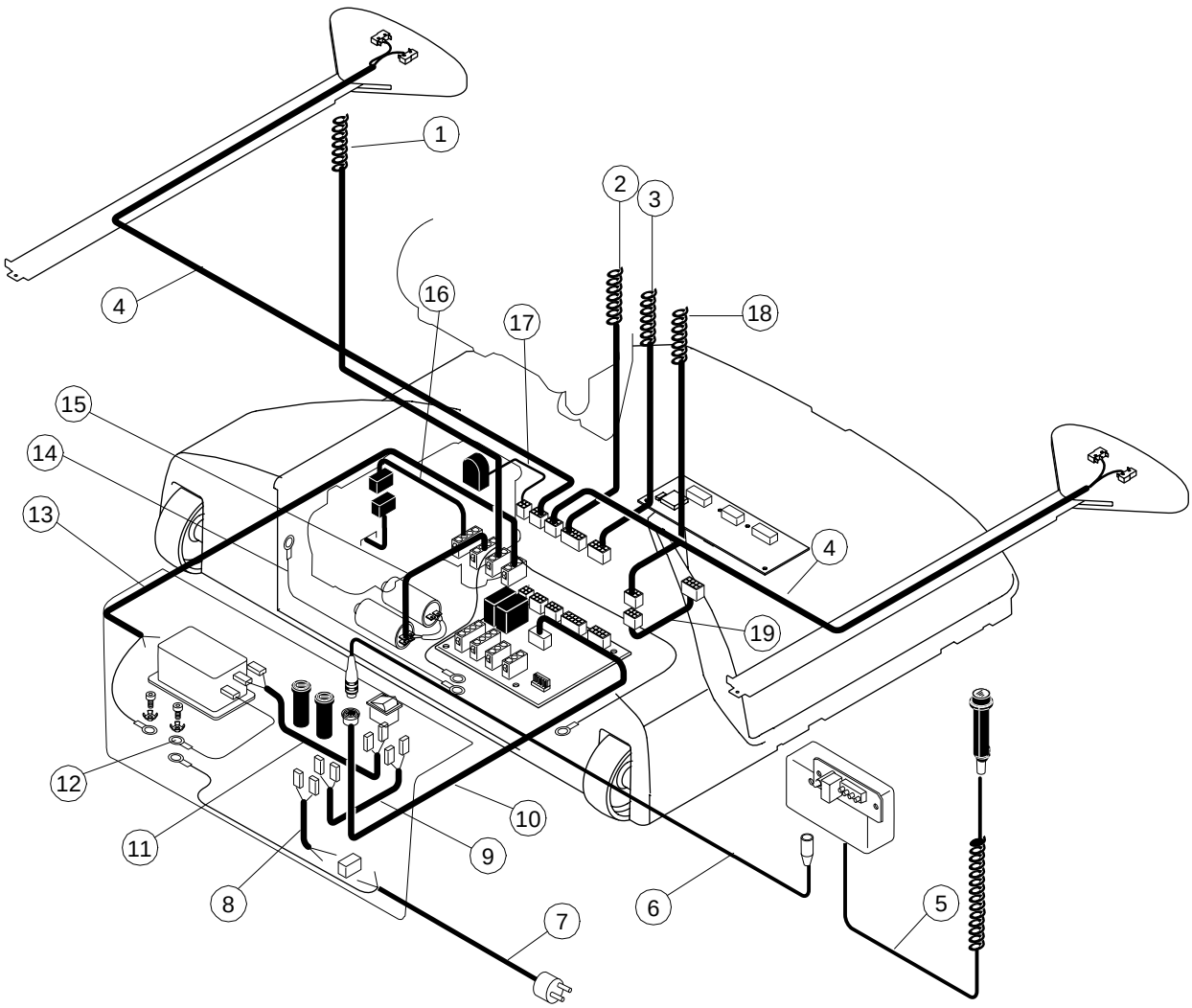
2.2 C-arm



Ref	Part no.	Description
1	7810010	Shelf collector circuit board
2	**7615123**	**AEC-sensor assembly**
3	7810009	Labeling circuit board
4	**7616105**	**Force sensor assembly**
5	7810006	Front collector circuit board
6	7810011	Collimator circuit board
7	7810020	Mag control circuit board
8	7810014	Tube processor circuit board
9	7810030	Upper keypanel collector PCB

3 CABLES & WIRES

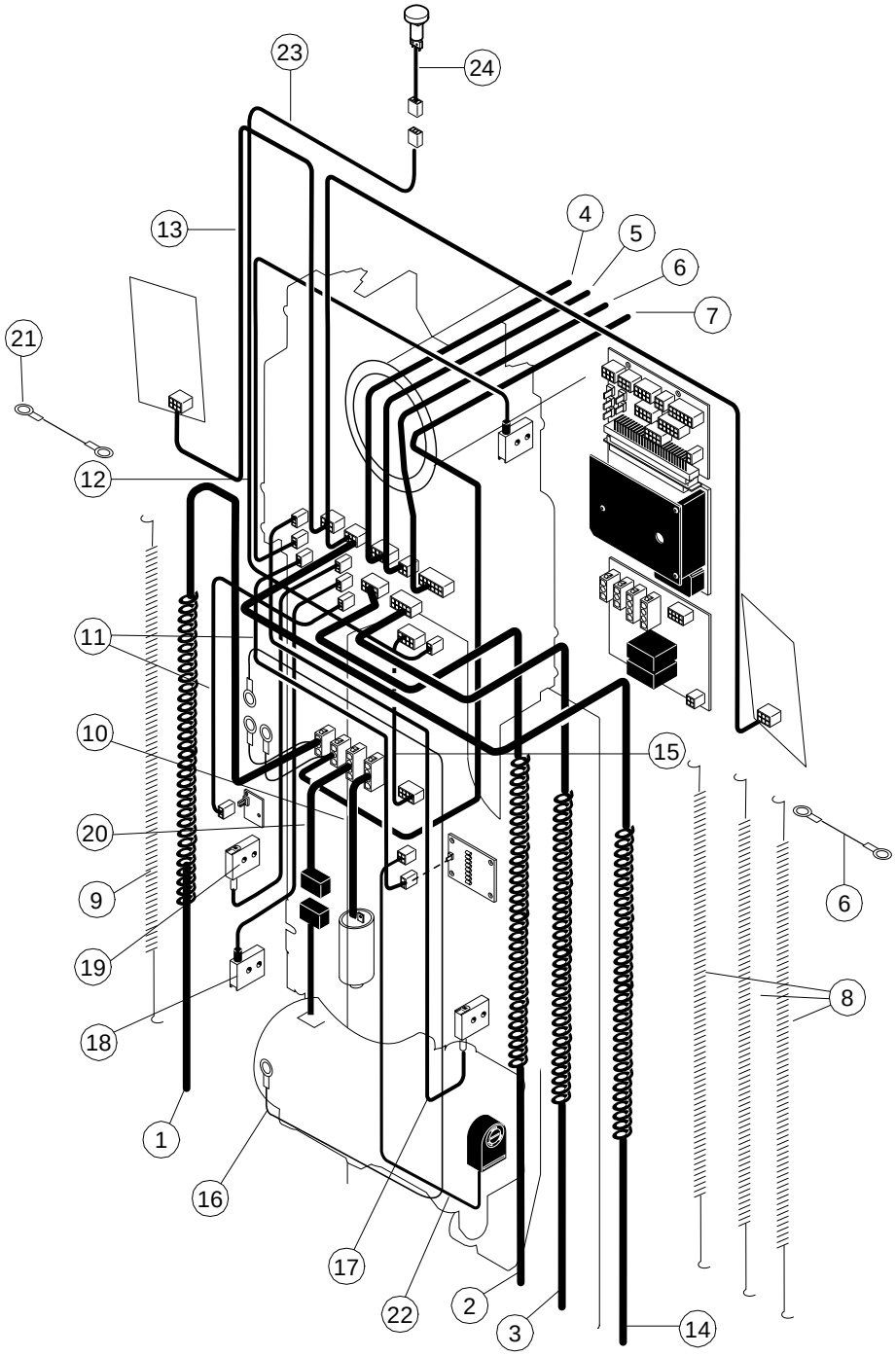
3.1 Base



Ref	Part no.	Description
1	7827712	Mains voltage spiral cable
2	7827713	Signal spiral cable
3	7827714	Power spiral cable
4A	7827808	Foot control cable for Lose Model (left & right)
4B	7827809	Foot control cable for Telescope (left & right)
5	0006184	Spiral cable (cable only)
6	7827752	Remote cotrol cable A, 10m
7A	7827711	Mains input cable, Europe
7B	7827755	Mains input cable, USA
7C	7827756	Mains input cable, GB
8	7827703	Mains fuse input cable
9	7827702	Mains fuse output cable

Ref	Part no.	Description
10	7827709	Remote control cable
11	7827701	Mains filter input cable
12	7827704	Mains filter ground cable
13	7827700	Mains filter output cable
14	7827754	Lift motor ground cable
15	7827740	Lift motor capacitor cable
16	7827707	Motor cable (Lift & rotation motor)
17	7827708	Lift motor pulse cable
18	7827799	Third spiral cable
19	7827807	Base display cable

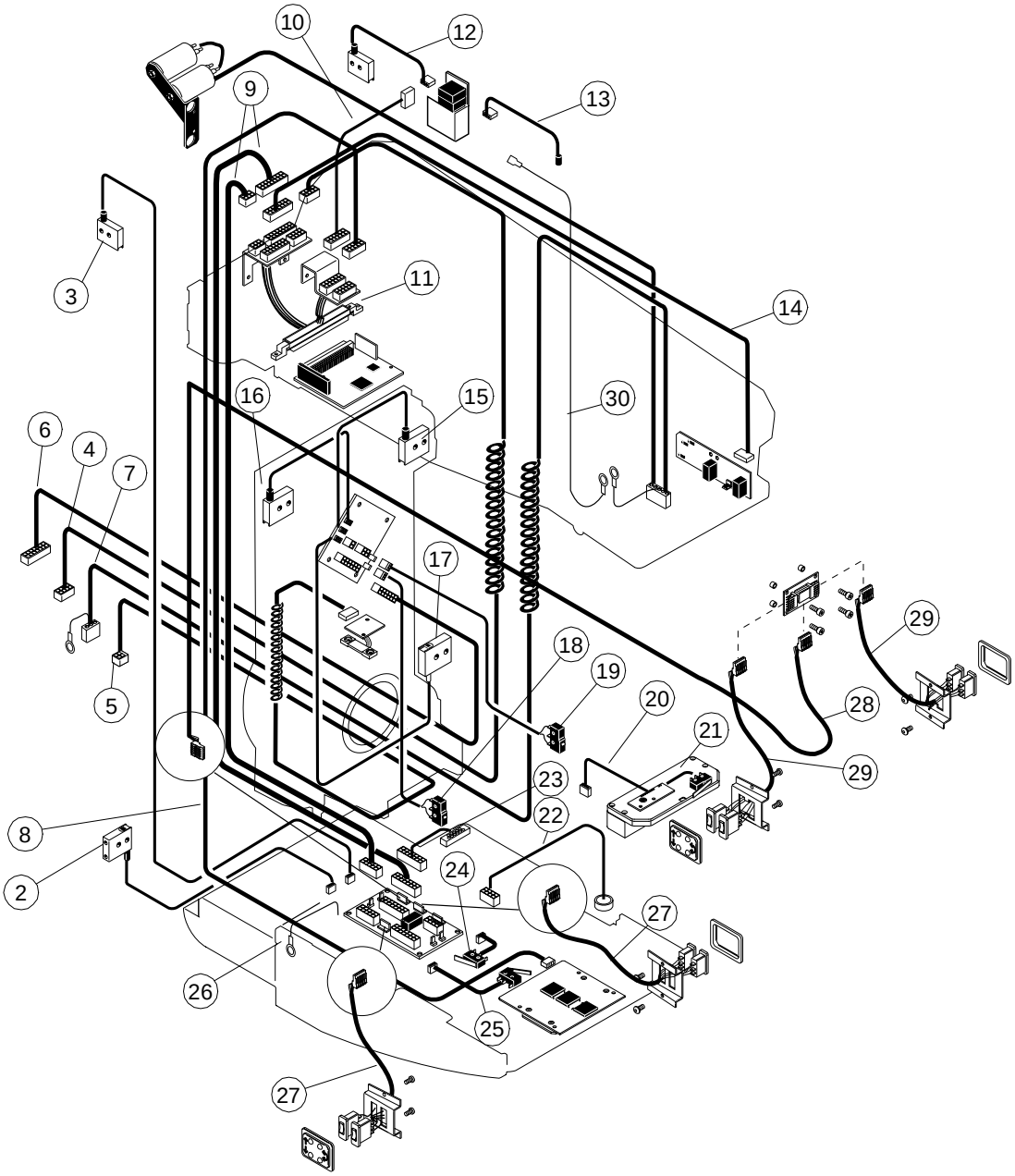
3.2 Telescopic column



Ref	Part no.	Description
1	7827712	Mains voltage spiral cable
2	7827713	Signal spiral cable
3	7827714	Power spiral cable
4	7827721	Tubehead to rear collector spiral cable
5	7827720	Force sensor spiral cable
6	7827719	Rear collector to front collector cable
7	7827722	Generator power spiral cable
8	7517225	Guide spring for signal spiral cable
9	7517224	Guide spring for mains spiral cable
10	7827706	Rotation motor capacitor cable
11	7827716	Movement reference cable
12	7827742	Rotation bottom Hall-cable

Ref	Part no.	Description
13	7827718	Right keyboard cable
14	7827799	Third spiral cable
15	7827715	Rear collector to SYNC PCB cable
16	7827753	Rotation motor ground cable
17	7827739	Rotation upper Hall-cable
18	7827749	Lift down Hall-cable
19	7827741	Lift up Hall-cable
20	7827707	Motor cable (Lift & rotation)
21	7827757	Bottom plate ground cable
22	7827708	Rotation sensor cable
23	7827804	Emergency switch cable 1.
24	7617170	Stop switch

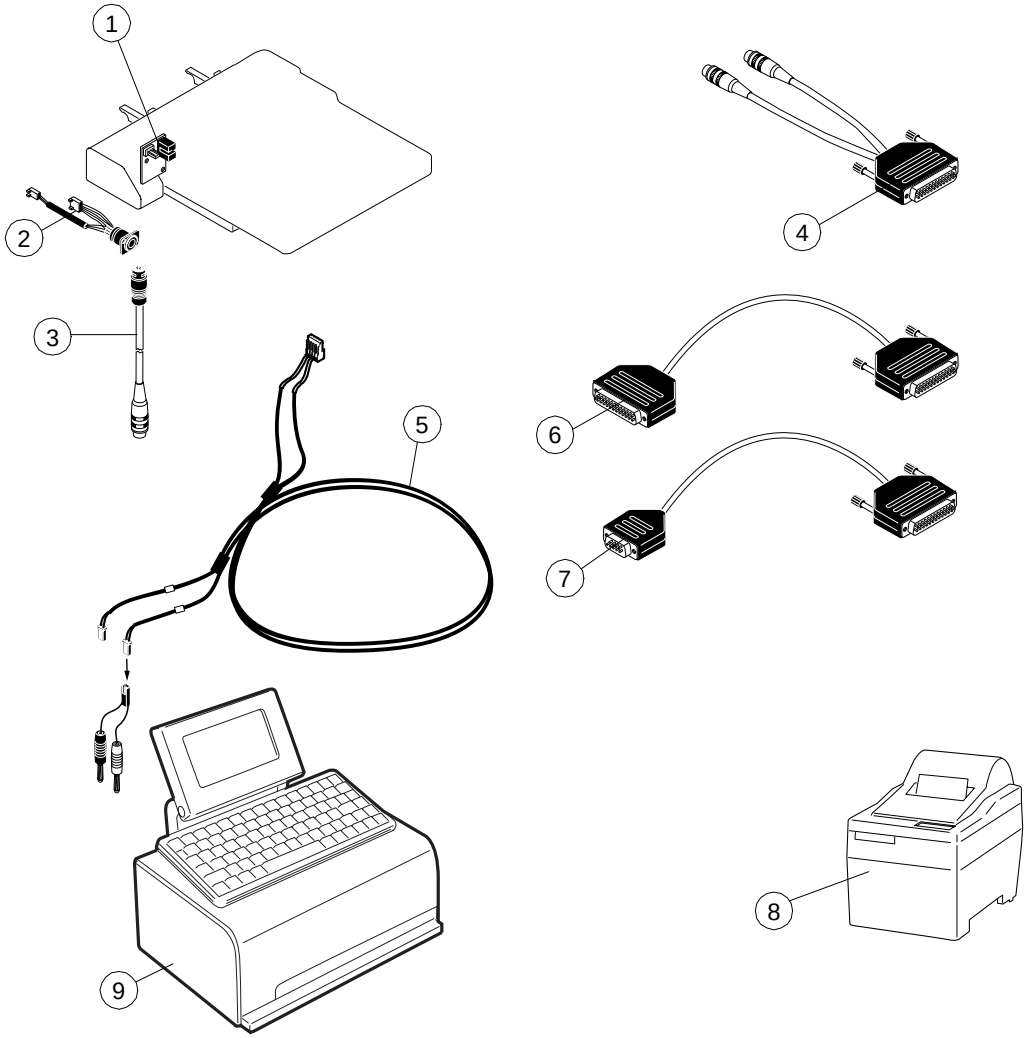
3.3 C-arm



Ref	Part no.	Description
1	7827729	Switch panel cable (Right & left side)
2	7827747	Magn.up Hall-cable
3	7827743	Mag.down Hall-cable
4	7827721	Tubehead to rear collector spiral cable
5	7827720	Force sensor spiral cable
6	7827719	Rear collector to front collector cable
7	7827722	Generator power spiral cable
8	7827727	Generator to AEC sensor
9	7827728	Generator to shelf collector cable
10	7827726	Generator to Mag.control cable
11	7827724	Tubehead interface cable
12	7827748	Mag.pulse Hall-cable
13	7827734	Tubehead temperature sensor cable
14	7827725	Generator to collimator cable
15	7827746	Press up Hall-cable

Ref	Part no.	Description
16	7827745	Release Hall-cable
17	7827744	Press down Hall-cable
18	7827723	Left platen sensor cable
19	7516236	Right platen sensor cable
20	7827730	Generator to labeling head cable
21	7827732	Labeling head microswitch cable
22	7827733	Bucky grid control cable
23	7827735	Stereotactic control cable
24	7827731	Small cassette detector cable
25	7827750	Large cassette detector cable
26	7827764	Bucky grid grounding cable
27	7827784	Side panel switch cable
28	7827787	Upper switch cable
29	7827729	Switch panel cable
30	7827789	Top cover grounding cable

3.4 Accessory cables & pcb´s



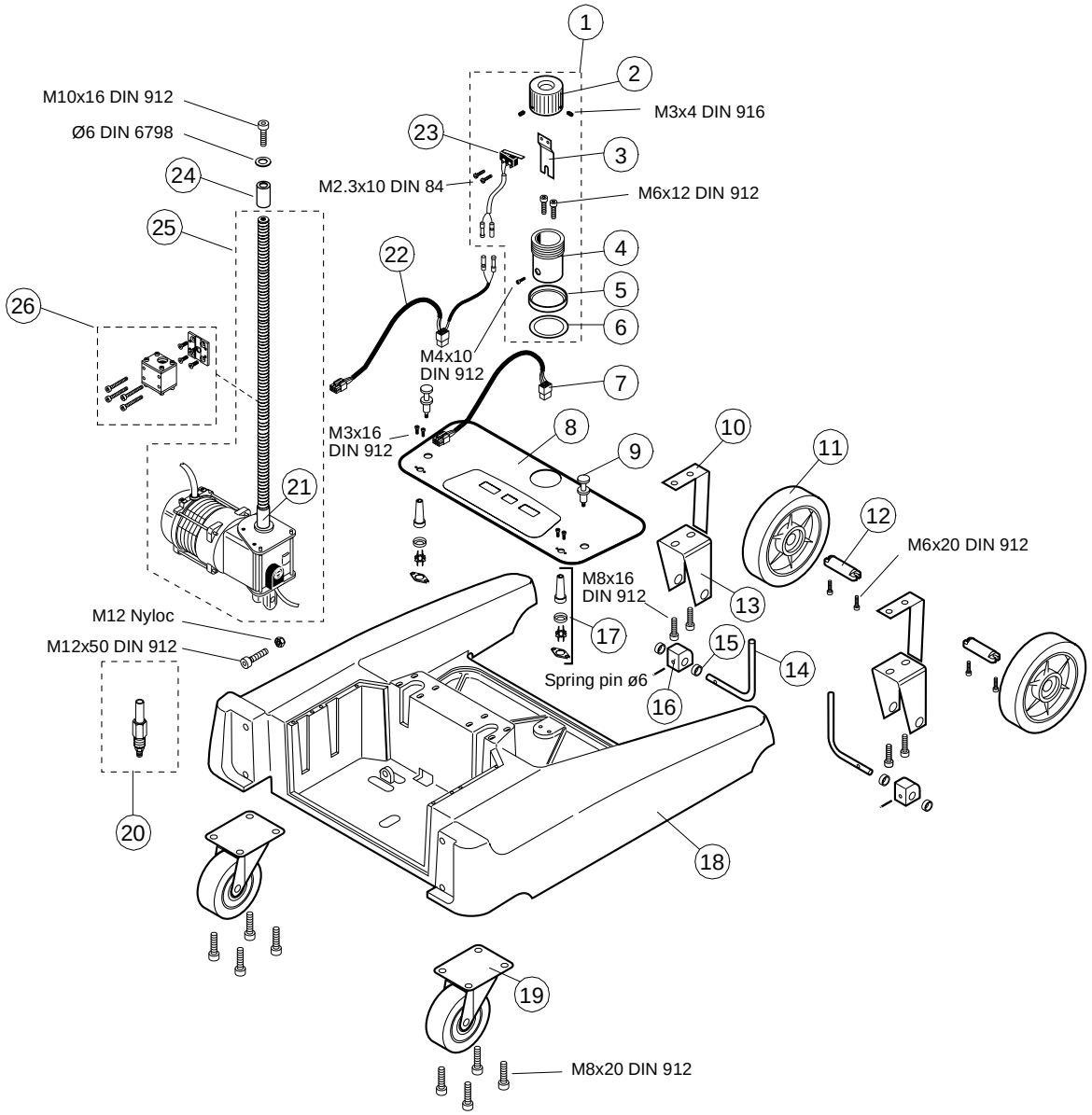
Ref	Part no.	Description
1	7810025	Bucky grid reference pcb
2	7827764	Bucky grid control cable ,out 2
3	7827737	Bucky grid control cable ,out 1
4	7614165	Planet adapter
5	7827773	Feed back measuring cable
6	7827779	Star printer cable
7	7827776	Livingston printer cable
8	7003013	Label writer with adapter cable
9	7003017	Daylight ID System with cables

Chapter

F

SOPHIE MOBILE PARTS

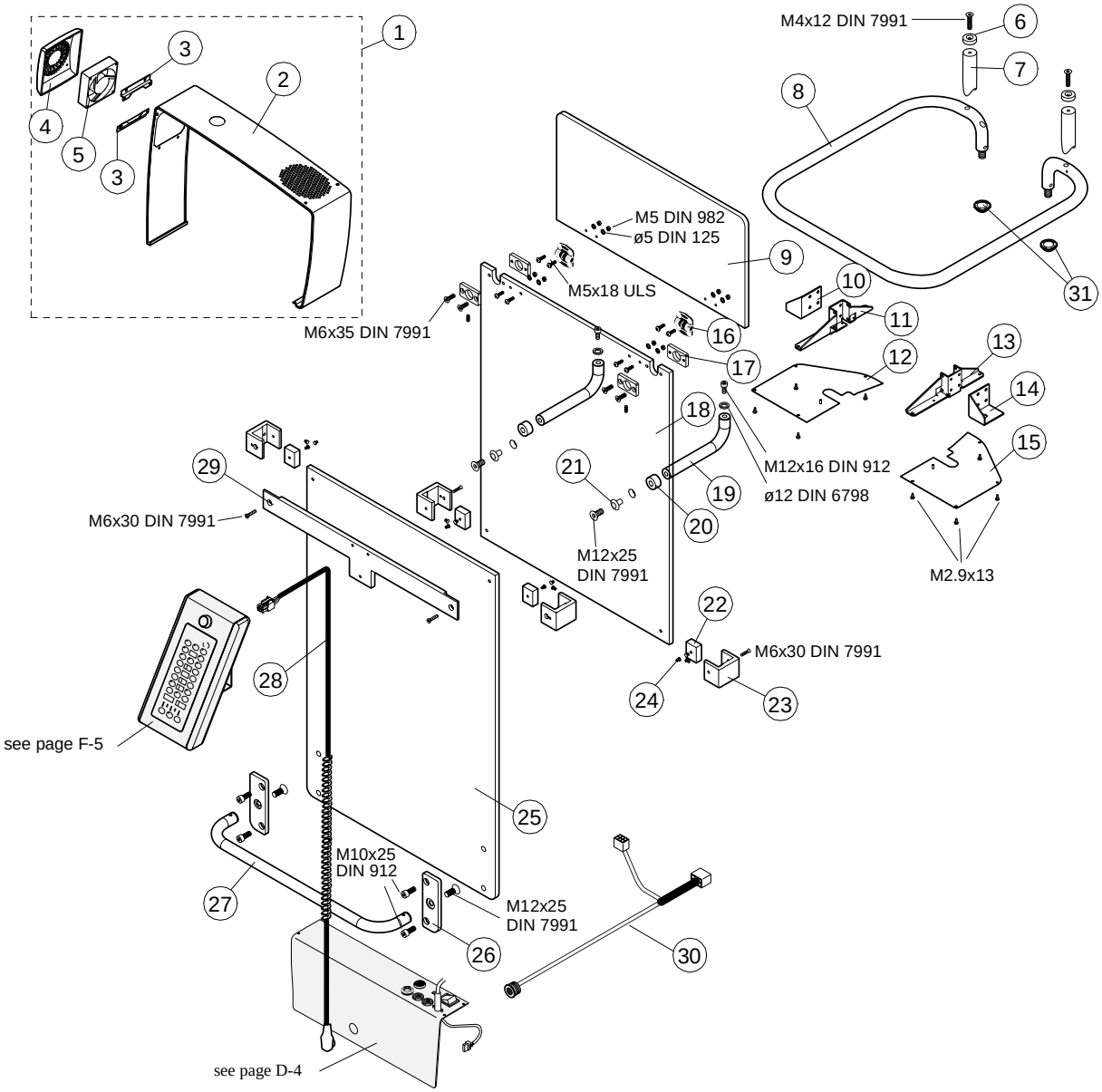
1 BASE CASTING ASSEMBLY



Ref	Part no.	Description
1	**7614172**	**C-arm locking nut assembly**
2	7528106	C-arm locking knob
3	7518110	Microswitch holder
4	7528105	Locking knob base
5	7528131	Locking knob limiter
6	7518112	Spacer
7	7827769	Foot control extension cable, right
8	7528113	Front cover plate
9	7528114	Cable holder
10	7518115	Spring plate
11	7211100	Front wheel
12	7518111	Front wheel axle
13	7518102	Brake frame
14	7528104	Locking lever

Ref	Part no.	Description
15	7518116	Sleeve
16	7518103	Brake block
17	0000949	Strain reliefer
18	7528101	Base casting
19	7211101	Rear wheel
20	**7617410**	**Magnet holder assembly**
21	7518117	Spacer
22	7827768	Foot control extension cable , left
23	7827767	Tubehead locking microswitch cable
24	7513172	Worm-screw cap
25	**7617207**	**Lift motor assembly**
26	**7617120**	**Nut assembly**

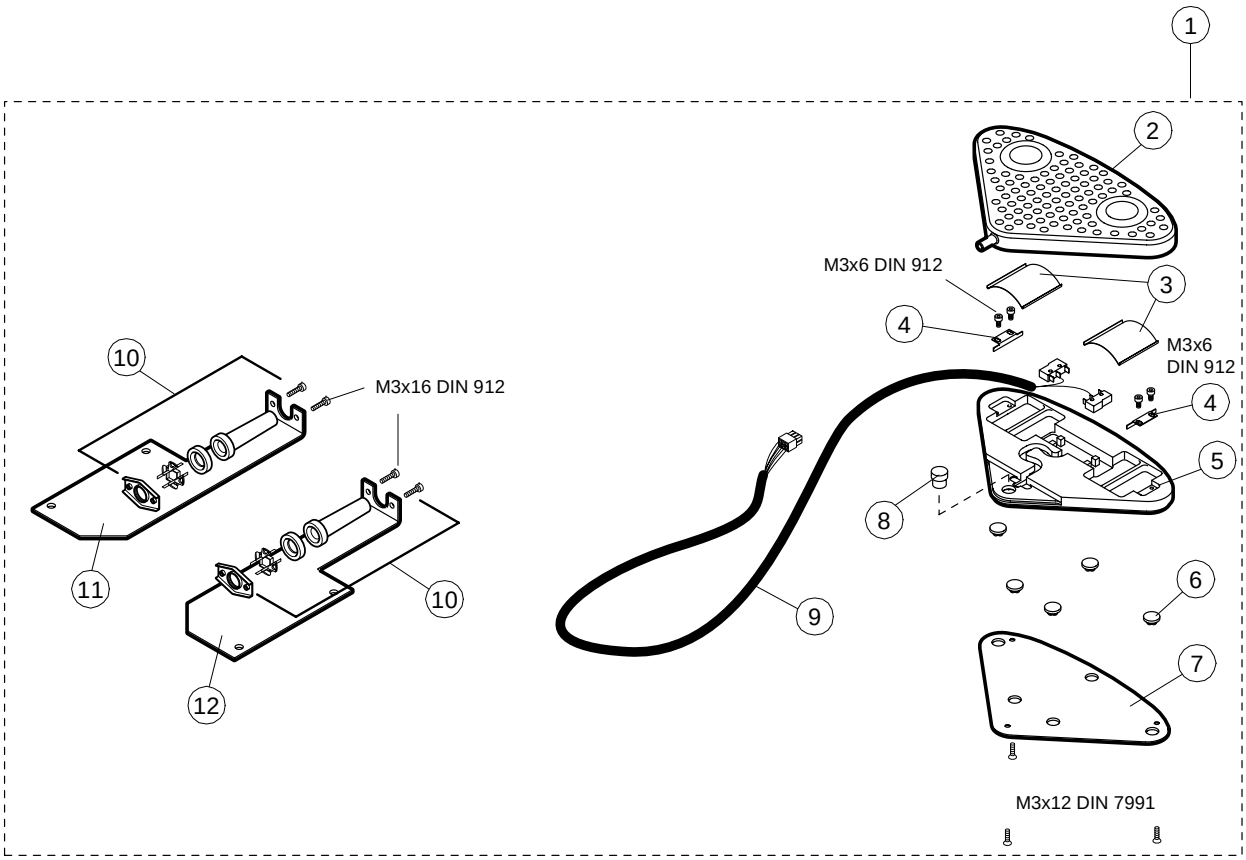
1.1 Radiation shield



Ref	Part no.	Description
1	7615474	C-arm top cover assembly
2	7525474	C-arm top cover
3	7515475	Fan support
4	7515476	Fan casting
5	7831011	Fan
6	7851025	Rubber stopper
7	7528217	Plug
8	7528310	Transportation handle
9	7518203	Folding radiation shield
10	7519804	Support frame
11	7519302	Head support arm, right
12	7529303	Hood bottom cover plate, right
13	7539302	Head support arm, left
14	7539804	Support frame
15	7549303	Hood bottom cover plate, left
16	7851020	Hinge
17	7528209	Handle fixing plate II

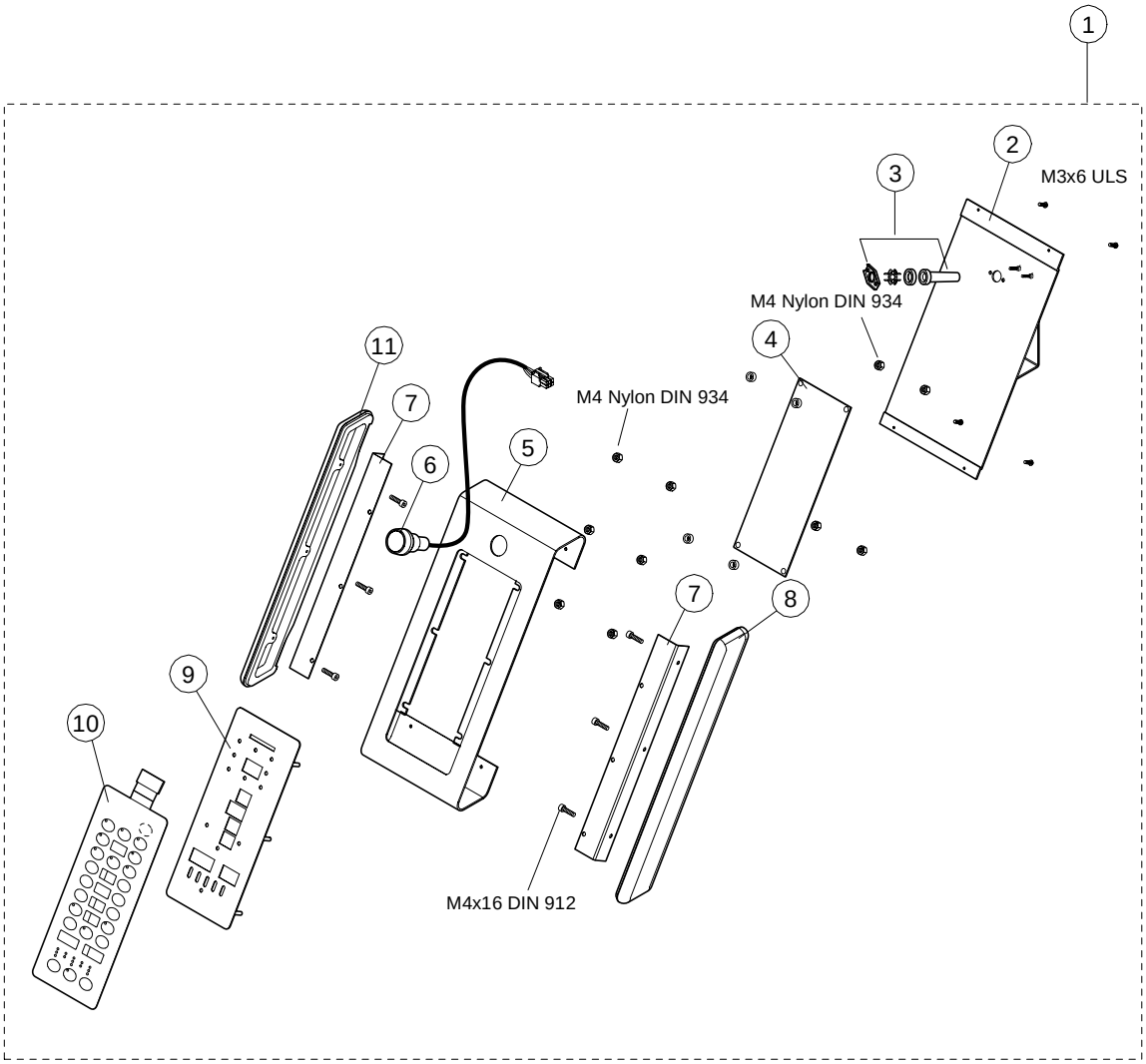
Ref	Part no.	Description
18	7518202	Telescopic radiation shield
19	7528205	Support bar
20	7519806	Sleeve
21	7518211	Bush
22	7528214	Fastening piece
23	7528206	Slide piece frame
24	7518207	Slide knob
25	7518201	Stationary radiation shield
26	7528204	Shield fixing plate
27	7529810	Lifting handle
28	7827800	Classic optional display cable 2.
29	7529811	Support plate
30	7827806	Extension cable for mobile unit
31	7513268	Transport handle hole cover plug

1.2 Foot control assembly



Ref	Part no.	Description
1A	**7617165**	**Foot control assembly, right**
1B	**7617166**	**Foot control assembly, left**
2	7517827	Foot control cover (trailing model)
3	7517815	Foot control spring
4	7517824	Spring guide
5	7517810	Foot control casting
6	2524446	Rubber pad
7	7527820	Bottom plate
8	7517822	Support knob
9	7827808	L & R Foot control cable LM
10	7851018	Strain reliefer HSUF1
11	7517819	Strain reliefer plate, right
12	7537819	Strain reliefer plate, left

1.3 Control panel



Ref	Part no.	Description
1	**7614185**	**Control panel assembly**
2	7529803	Control panel support plate
3	7851018	Strain reliefer
4	7810032	Display PCB
5	7529802	Control panel housing
6	7827770	Exposure switch cable
7	7519804	Corner plate
8	7529805	End piece, right
9	7519304	Contolr panel plate
10	7841081	Control panel membrane
11	7549805	End piece, left